PB83-110767

Compilation of BACT/LAER Determinations

PEDCo-Environmental, Inc.
Cincinnati, OH

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

May 79

U.S. Department of Commerce
National Technical Information Service

United States
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Agency

Office of Air Quality
Planning and Standards
Research Triangle Park NC 27711

EPA-450/2-79-003
May 1979

Air

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EPA

Compilation of BACT/LAER Determinations

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15. SUPPLEMENTARY NOTES This report will be supplemented from time to time as new determinations require. Users of this report should contact Regional Offices to get number of subsequent reports.

16. ABSTRACT

The report gives the results of a survey of Regional files for PSD and nonattainment permits issued. The original permit applications in the Regions' files were reviewed and summary sheets completed from the data contained in the applications. The main purpose of the summary sheets was to let people know where similar source category determinations have been made. Only a selected number of determinations per category are shown on the summary sheets followed by a total listing of locations where all other similar category determinations have been made. The vast majority of these determinations are BACT and up to January 1979.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS		b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air Pollution	Bark	Air Pollution Control	
Industrial Processes	Nitrogen Oxides	Stationary Sources	
Combustion Sources	Scrubbers	BACT	
Control Equipment	Baghouses	LAER	
Coal	Electrostatic Precipitators	Sulfur Dioxide	
Oil		Particulate	

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Compilation of BACT/LAER Determinations

by

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Contract No. 68-02-2603
Task No. 42

EPA Project Officer: Gary Rust

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air, Noise, and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

May 1979

CONTENTS

Introduction
Instructions/Forms
New Source Review Contact List of U.S. EPA Regions
BACT/LAER Determinations by Source Category

1. External Combustion
2. Solid Waste Disposal
3. Internal Combustion
4. Evaporative Loss
5. Chemical Process Industries
6. Food and Agricultural Industries
7. Metallurgical Industries
8. Mineral Products Industries
9. Petroleum Industry
10. Wood Processing
11. Miscellaneous

INTRODUCTION

The Clean Air Act as amended in 1977 contains technology-based limitations affecting the location and construction of new or modified air pollution sources: (1) New Source Performance Standards (NSPS); (2) National Emission Standards for Hazardous Air Pollutants (NESHAPS): (3) Best Available Control Technology (BACT); and (4) Lowest Achievable Emission Rate (LAER). Adoption of Regulations for the Prevention of Significant Air Quality Deterioration, the issuance of the Emission Offset Interpretive Ruling and increased NSPS promulgations have greatly increased the complexity of new source review (NSR) determinations. While the specific criteria governing a BACT, LAER or NSPS determination vary, the general underlying approach for all such determinations is to require "best control" on all major new sources. Both the complexity and workload of making NSR decisions has risen drastically. New source review is a continuing program and the making or overseeing of complex decisions impacts most heavily on State, Local, and Regional offices. It is extremely important that national consistency be evidenced in the control technology decisions made in the field. Thus the overall purpose of this "Compilation of BACT/LAER Determinations" is to provide support to those making BACT/LAER determinations, to engender and ensure national consistency in control technology decisions and to establish a formal system that promotes communication, cooperation and sharing of information.

It is important to state the intended purpose of this report, what it is and what it is not. The intended purpose

is to provide field offices with current information on determinations that have been made, abstracts of recent determinations on sources of a similar size and nature, and useful, although limited, data on emission limits imposed and the control strategies utilized to achieve those limitations. The information presented contains pertinent data abstracted from determinations made nationwide, allows one to ascertain if a determination on a source of a similar size and nature has been made, the substance of that determination and gives a quick reference that can lead to the acquisition of more detailed information.

The compilation is not and is not intended to be a comprehensive, detailed reporting of determinations made. Since both BACT and LAER are to be determined on a case-by-case basis the inclusion of detailed information on each determination would be of questionable utility and might tend to prescribe and bias the individualized consideration to be afforded an entity that seeks approval to install a new - or modify an existing - source. Additionally if this compilation is to remain current, be useful and used, it must be continually up-dated by reports from the field. A detailed reporting requirement would not likely find favor with field personnel, would be burdensome and counter productive.

Thus the information presented is limited to that which field offices indicated would be most useful to them, is easily abstracted from a determination and is therefore reportable with minimal effort. The importance of field office reporting cannot be overemphasized. An effective and intensive system of cooperation and communication is necessary if State, Local and Regional offices are to be advised and kept current regarding actual control determinations, policy and precedent and if national consistency is to be promoted. For the compilation to be effective, provide useful support and serve as a BACT/LAER clearinghouse, diligent two-way

communications are imperative. Since NSR decisions are dynamic in nature the results of field determinations must be reported as they are made and, equally important, must be distributed back to the field in a timely fashion. The primary benefactors of this compilation are those engaged in new source review activities. Field offices are therefore urged to contribute to its value and utility by routinely reporting on the determinations made so that they and others may benefit.

Content

The initial compilation contains abstracts of BACT and LAER determinations obtained from the files of U.S. EPA regional offices. The BACT determinations were made under two sets of regulatory requirements and decision criteria - i.e., those made under PSD regulations prior to the Clean Air Act Amendments of 1977 and those made under PSD regulations subsequent to the amendments. It will be noted that relatively few LAER determinations were included in the starter compilation. Since the initial compilation effort was limited to perusal of EPA regional files, the main source of LAER determinations - state files - was not examined. Retrieval and distribution of additional LAER determinations is anticipated in the near future.

Format

For ease of quick reference and use the compilation is divided into familiar source category headings. The various section titles and subtitles are generally the same as found in EPA publication AP-42 - "Compilation of Air Pollutant Emission Factors." Within each source category or subcategory appear the abstracts of BACT and/or LAER determinations for that source or facility type.

Not all abstracts of a given type are presented. In general the determination (or determinations) provided are those that best represent the source category and exemplify

applicable control technology, control strategy detail, completeness, governing policy or are precedental in nature. Where appropriate additional determinations may be included that are unique or substantially different (because of size, process or fuel parameters, or other) and for which the example determination is not typical. All other determinations that have been reported for a category are listed in a summary table following the example determinations.

Use

Use of the compilation is straight-forward. Upon receipt of an application for construction, reconstruction or modification the user can discover the number of previous determinations for similar sources or facilities; their location, size and pollutants emitted; the basis for and substance of emission limits; the control strategy to be employed; and most importantly, the point of contact to acquire additional information. The compilation serves to expedite the new source review process by offering the user immediate knowledge regarding the substance of determinations made on similar sources and gives a quick reference and lead to the acquisition of more detailed information.

Compilation Update

The available data base for this compilation will expand as more determinations are made and reported. Additionally, while the basic criteria on which determinations are to be made may not change, the substance of those criteria may. Changes in state implementation plan (SIP) limitations will occur in response to the CAA of 1977 mandated revisions. Advances in control technology, equipment performance and the evolution of innovative technology can be expected to result in lower achieved-in-practice emission levels. Additional NSPS are scheduled for promulgation in the near future and some existing NSPS are under consideration for revision.

As the data base broadens and as changes occur in the technical or policy aspects of NSR determination the compilation must also change in order to provide an up-to-date and current reference source and technical service. Timely reporting of determinations by regional, state and local agency offices and the early distribution of reported data back to the field is essential to that up-date. Equally important is the rapid dissemination to the field of any change or anticipated change in regulations, policy, or other NSR related matters. An effective system of two way communication can result in a compilation of determinations that is current, useful, reflects NSR policy and contributes to consistency in determinations.

INSTRUCTIONS FOR COMPLETING BACT/LAER FORM

The purpose of this compilation is to assist field offices and to provide a technical service to those engaged in new source review activities. The value and utility of the compilation is in large measure dependent upon the quantity, quality and timeliness of input received from the field offices. Field offices are therefore urged to routinely contribute to this compilation and thus enhance its content, coverage and value to them as a resource tool. Explanation of the reporting form follows:

1. Source Type/Size

   Where possible, use one of the categories* listed in the compilation to define the source type. Size should indicate the total capacity of the new (modified) plant.

2. Name/Address

   Name of the applicant and the location of the proposed facility.

3. Conditional - Final/Pending

   Circle "conditional" if the permit lists specific emission limits, but the precise nature of the control strategy (i.e. source of fuel, control equipment, manufacturer) has not been specified.

   Circle "pending" or "final" depending on status of the determination.

4. Basis of BACT/LAER

   Circle "BACT" or "LAER" depending on type of determination.

*The categories are the same as and patterned after those found in "Compilation of Air Pollutant Emission Factors", EPA Publication AP-42, U.S. Environmental Protection Agency Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711

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INSTRUCTIONS FOR COMPLETING BACT/LAER FORM (Continued)

5. New/Modified Source

   Circle "new" or "modified" according to definitions of the Clean Air Act.

6. Affected Facilities

   List each facility by name (kiln, boiler, etc.) for which a throughput limit, operating limit, emission limit, control strategy, performance or equipment standard, etc. has been specified.

7. Indicate the input rate of raw material and/or fuel to the facility (as tons/hr, millions Btu/hr, etc.) when operated at maximum design capacity.

8. Pollutants Emitted

   List each pollutant or parameter for which a control requirement or other restraint has been specified (as PM, SO_2, CO, NO_x, Opacity, etc.)

9. Emission Limits

   The emission limitations as stated in the permit or permit conditions should be listed here and aligned horizontally with its companion pollutant in the previous column (8). Mass emission rate is preferred. Be precise in defining - as 150 ppm NO_x at 3% excess O_2, 0.1 lb/hr and 5% opacity, etc.

10. Control Strategy Description

    Control strategy includes control equipment (ESP, fabric filter, etc.), operational modifications, limits on the type and amount of raw materials used, limits on throughput or hours of operation, maintenance requirements, equipment specifications, etc. These listings should be aligned with data presented in preceding columns (8 and 9).

11. Notes

    Use this space to amplify or explain any of the other entries - such as an explanation of any unusual permit conditions or features, changing permit requirements with time, off-set requirements, etc.

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: _____

NAME/ADDRESS: _____

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: _____ BASIS: BACT/LAER
FOR NEW/MODIFIED SOURCE

BY _____ _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR*	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff. %

NOTES: _____

_____

_____

* Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER

CONTACT LIST U.S. EPA REGIONS

Region	Address	Telephone
I	John F. Kennedy Federal Building Room 2303 Boston, MA 02203	(617) 223-4448
II	Federal Office Building 26 Federal Plaza, New York, NY 10007	(212) 264-2611
III	Curtis Building Sixth and Walnut Streets Philadelphia, PA 19106	(215) 597-8177
IV	345 Courtland, NE Atlanta, GA 30308	(404) 881-2864
V	230 South Dearborn Chicago, IL 60604	(312) 353-2205
VI	First International Building 1201 Elm Street Dallas, TX 75270	(214) 767-2746
VII	324 E. 11th Street Kansas City, MO 64108	(816) 374-3791
VIII	1860 Lincoln Street Denver, CO 80295	(303) 837-3763
IX	215 Fremont Street San Francisco, CA 94105	(415) 556-8005
X	1200 Sixth Avenue Seattle, WA 98101	(206) 442-1387

BACT/LAER COMPILATION CATEGORIES

1.0 External Combustion

- 1.1 Coal fired
- 1.2 Oil fired
- 1.3 Other - wood, bagasse, gas, etc.

2.0 Solid Waste Disposal

- 2.1 Refuse incineration (liquid, solid)
- 2.2 Sewage sludge incineration
- 2.3 Other - auto body, pathological, etc.

3.0 Internal Combustion

4.0 Evaporative Loss

- 4.1 Surface coating
- 4.2 Petroleum liquids storage
- 4.3 Transportation and marketing of petroleum liquids
- 4.4 Other

5.0 Chemical Process Industries

- 5.1 Acid manufacture
- 5.2 Carbon black
- 5.3 Charcoal
- 5.4 Paint and varnish
- 5.5 Sulfur and sulfur recover
- 5.6 Other - explosives, etc.

6.0 Food and Agricultural Industries

- 6.1 Alfalfa dehydrating
- 6.2 Feed/grain mills and elevators
- 6.3 Fertilizer
- 6.4 Other

BACT/LAER COMPILATION CATEGORIES (Continued)

7.0 Metallurgical Industries

- 7.1 Primary aluminum
- 7.2 Metallurgical coke
- 7.3 Ferroalloy
- 7.4 Foundries - gray iron, steel, non-ferrous
- 7.5 Iron and steel mills
- 7.6 Primary smelters - copper, lead, zinc
- 7.7 Secondary metal processing - aluminum, lead, zinc
- 7.8 Other

8.0 Mineral Products Industries

- 8.1 Asphalt and concrete batch plants
- 8.2 Coal preparation
- 8.3 Fiber glass and glass
- 8.4 Gypsum and lime
- 8.5 Mineral quarrying and processing
- 8.6 Portland cement
- 8.7 Other

9.0 Petroleum Industry

- 9.1 Petroleum refining

10.0 Wood Processing

- 10.1 Chemical wood processing (pulp mills)
- 10.2 Other

11.0 Miscellaneous

1.0 EXTERNAL COMBUSTION

1.1 Coal fired

1.2 Oil fired

1.3 Other - wood, bagasse, gas, etc.

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ELECTRIC GENERATING STATION

NAME/ADDRESS: TUCSON GAS AND ELECTRIC, TUCSON, ARIZONA Site at Apache County, AZ

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 12/21/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Coal-fired generating units (2)	350 MW each (1200x10^6 Btu/h each)	TSP	[b] 0.034 lb/10^6 Btu (B)	Hot side ESP	
		SO_2	[b] 0.69 lb/10^6 Btu (B)	Wet lime scrubbing	64
		NO_x	[b] 0.697 lb/10^6 Btu (N)		
		Opacity	15%		
Coal handling [a]		TSP		Spray application and dust collectors	
Bottom ash [a]				Hydraulic conveyance	
Fly ash [a]				Pneumatic conveyance	

NOTES: [a] - Detailed control strategy for these facilities is given in permit. Wet suppression shall be used to control fugitive dust during construction. Sampling of coal is required.

[b] - This degree of control was proposed by the company in its application.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ELECTRIC GENERATING UNIT NO.5 350 MW

NAME/ADDRESS: ARIZONA PUBLIC SERVICE COMPANY, PHOENIX, AZ Site at Joseph City, AZ

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/15/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Coal-fired boiler	350 MW	TSP a	0.05 lb/10^6 Btu	ESP	
	(12000x10^6Btu/h)	SO_2 a	0.072 lb/10^6 Btu	Wet limestone scrubbing and low S coal	94
		NO_x	0.7 lb/10^6 Btu (N)		
Coal handling areas		TSP		Dust control system	
Limestone handling areas		TSP		Dust control system	

NOTES: a - The degree of control was proposed by company in its application.
Fugitive dust shall be controlled during construction by water spray. Bottom ash shall be pumped to a spray pond. Ash shall be mixed with waste sludge from SO_2 absorbers and or wastewater from cooling tower and transported in a slurry to a separate disposal area.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: McINTOSH 364 MW BOILER (UNIT NO.3)

NAME/ADDRESS: LAKELAND, FL UTILITIES

DETERMINATION IS: CONDITIONAL/FINAL/(PENDING) DATE OF ISSUE: _____ BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW) MODIFIED SOURCE

BY EPA, REGION IV _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
			Fuel [a] Limit		
Unit No. 3	3240x10^6 Btu/hr	Part.	C .044 lb/10^6 Btu (B)	ESP	99.5
			C&R .050 "		
			O .070 "		
			O&R .075 "		
		SO_2	1.2 lb/10^6 Btu (B)	Scrubber	80
		NO_x	O,C&R 0.7 lb/10^{6}Btu (B)		
			O,C&R 0.3 lb/10^{6}Btu (B)		

NOTES: C = Coal; O = Oil; R = Refuse
Unit is dry-bottom unit. Fired with pulverized coal, refuse, oil-fired.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROCHEMICAL (CHLOR-ALKALI/ETHEYLENE DICHLORIDE)

NAME/ADDRESS: HCC CHEMICAL COMPANY, 6100 OAK TREE BLVD., CLEVELAND, OH 44131

DETERMINATION IS: (CONDITIONAL)/FINAL/PENDING: DATE OF ISSUE: 1/17/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION: Equipment type, etc.	Eff.,%
2 Coal/oil boilers (7/78) and (8/78)	330x10^6 Btu/hr	TSP	5.5 lbs/hr (B)	Multi-compartment bag-house, continuous monitoring, single alkali scrubber, continuous flue gas O_2 control	99.7
		SO_2	110.4 lbs/hr (B)	FGD Single Alkali Scrubber	96
		NO_x	236.8 lbs/hr (B)	LEA controlled by F/G O_2 control. Two stage combustion - low NO_x burners, continuous NO_x monitoring. Single Alkali F.G. scrubber	20-70
		CO	19.7 lbs/hr (B)	F.G. Oxygen control	

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROCHEMICAL (CHLOR-ALKALI/ETHEYLENE DICHLORIDE)

NAME/ADDRESS: HCC CHEMICAL COMPANY, 6100 OAK TREE BLVD., CLEVELAND, OH 44131

DETERMINATION IS: (CONDITIONAL)/FINAL/PENDING: DATE OF ISSUE: 1/17/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Waste Gas Boiler (9/78)		TSP	2.17 lbs/hr (B)	Use of Gaseous Fuel, F.G. oxygen control	
		NO_x	46 lbs/hr (B)	LEA firing and F.G. O_2 control, 2 stage combustion - low NO_x boiler/burner design.	
		CO		F.G. O_2 control	
Coal crusher (10/78)		TSP	2.15 lbs/hr (B)	Baghouse filters	99.7
Coal bunker (11/78)		TSP	.36 lbs/hr (B)	Baghouse filters	99.7
Ash Handling		TSP	.23 lbs/hr (B)	Baghouse filters	99.7

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROCHEMICAL (CHLOR-ALKALI/ETHEYLENE DICHLORIDE)

NAME/ADDRESS: HCC CHEMICAL COMPANY, 6100 OAK TREE BLVD., CLEVELAND, OH 44131

DETERMINATION IS: (CONDITIONAL)/FINAL/PENDING: DATE OF ISSUE: 1/17/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI (Agency) _____ (Person) _____ (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Coal Handling		Fugitive TSP	5.3 lbs/hr (B)	Shrouded Conveyors. Water spray at crusher, dust collection at transfer points. Maintenance of separate active and inactive coal piles.	

NOTES: _____

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - EXTERNAL COMBUSTION SOURCES 1.0
(COAL FIRED - 1.1)

NAME - LOCATION	SIZE (c-coal, o-oil, w-wood, b-bagasse, g-gas)	REGION	BACT/LAER
CRA, Inc. Coffeeville, KS	$480x10^6$ Btu/hr (c)	VII	x
City of Grand Island, NE	100 MW (c)	VII	x
Board of Public Utilities Kansas City, KS	256 MW (c)	VII	x
Big River Electric Company Robards, KY	$2660x10^6$ Btu/hr (c)	IV	x
Wisconsin Public Service Corp. Weston, WI	$3423x10^6$ Btu/hr (c)	V	x
Carolina Power & Light Roxboro, NC	$3940x10^6$ Btu/hr (c)	IV	x
Delmarva Power & Light Indian River, DE	400 MW (c)	III	x
Wisconsin Power & Light Sheyboygan, MI	400 MW (c)	V	x
Otter Tail Power Company Beulah, NC	440 MW (c)	VIII	x
Public Service Co. of Colorado Brush, CO	500 MW	VIII	x
Minnesota Power & Light Cohasset, MN	500 MW (c)	V	x
East Kentucky Power Corp. Maysville, KY	526 MW (c)	IV	x
Miller Steam Plant Porten, AL	600 MW (c)	IV	x
Associated Electric Co-Op Moberly, MO	610 MW (c)	VII	x
Kansas City Power & Light Kansas City, MO	630 MW (c)	VII	x
Iowa Southern Utilities Company Centerville, IA	727 MW (c)	VII	x
Electric Co-Op Inc. Merom, IN	8870.10^6 Btu/hr (c)	V	x
Basin Electric Power Co-op Mercer County, ND	880 MW (c)	VIII	x

Continued

ADDITIONAL DETERMINATIONS - EXTERNAL COMBUSTION SOURCES 1.0

(COAL FIRED - 1.1)

NAME - LOCATION	SIZE (c-coal, o-oil, w-wood, b-bagasse, g-gas)	REGION	BACT/LAER
Kentucky Utilities Company Ghent, KY	1100 MW (c)	IV	x
Wisconsin Electric Power Company WI	1160 MW (c/o)	V	x
Florida Power Corp. Crystal River, FL	$12,330 \times 10^6$ Btu/hr (c) 800 tons/hr (materials handling)	IV	x
Kansas Power & Light St. Marys, KS	1440 MW (c)	VII	x
Basin Electric Power Co-Op Wheatland, WY	1710 MW (c)	VIII	x
Indiana & Michigan Electric Co. IN	2600 MW (c)	V	x
Sikeston Light & Water Sikeston, MO	1,750,000 lb coal/hr (c)	VII	x
Cincinnati Gas & Electric Co. Rabbit Hash, KY	$12,600 \times 10^6$ Btu/hr (c)	IV	x
Big Rivers Electroc Corp. Robards, KY (Unit #2)	2660×10^6 Btu/hr (c)	IV	x
Northern States Power Becker, MN	800 MW (c)	V	x
Salt River Project St. Johns, AZ	350 MW (c)	IX	x
South Carolina P.S. Authority Georgetown, SC	560 MW (c)	IV	x
Louisville Gas & Electric Wise's Landing, KY	$22,800 \times 10^6$ Btu/hr (c)	IV	x
Wisconsin Power & Light Sheboygan, WI	400 MW (c)	V	x
Sierra Pacific Power Company Reno, NV	500 MW (c)	IX	x
Georgia Pacific Corp. Jarratt, VA	102×10^6 Btu/hr (c)	III	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: DIESEL FIRED GENERATING UNITS

NAME/ADDRESS: HAWAIIAN ELECTRIC COMPANY, INC., HONOLULU, HI Site at Maui, HI

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/13/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR(NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Diesel fired generating units (2)	13.75 MW each	NO_2	1.5 lb/10^6 Btu (B)		
		TSP	0.054 lb/10^6 Btu (B)		
		CO	0.41 lb/10^6 Btu (B)		
Fuel oil storage tank					

NOTES: Fuel oil consumption limited to 1592 gal/hr (ann. avg.), sulfur content limited to 0.5% (daily max. avg.)

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: BOILER - OIL FIRED

NAME/ADDRESS: ANHEUSER-BUSCH, INC., SACRAMENTO, CA Site at Van Nuys, CA

DETERMINATION IS: CONDITIONAL (FINAL) PENDING: DATE OF ISSUE: 2/1/79 BASIS:* BACT[1] (LAER) BACT[2]
FOR (NEW) MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Steam boilers (2)	125,000 lb/hr	SO_2		Low S oil 0.25%	
	steam each				
	Limited by	NO_x	0.27 lb/10^6 Btu (L)	Low NO_x burners, two-	
	permit			stage combustion	
Existing boilers (4)	Total of	NO_x	0.47 lb/10^6 Btu	As above	
	210,000 lb/hr				
	limited by				
	permit				

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: OIL RECOVERY EQUIPMENT - STEAM GENERATORS

NAME/ADDRESS: GETTY OIL COMPANY, BAKERSFIELD, CA Site at Kern County, CA

DETERMINATION IS: CONDITIONAL (FINAL) PENDING: DATE OF ISSUE: 11/28/78 BASIS:* BACT[1] (LAER) BACT[2]
FOR (NEW) MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Steam generators (25)	50x10^6 Btu/hr each	SO_2	0.14 lb/10^6 Btu max. 2 hr avg.	Scrubbers	90
		NO_x	0.18 lb/10^6 Btu max. 2 hr avg.	Ammonia injection	
New wells (49)		HC		Hydrocarbon recovery (also required on existing wells)	97

NOTES: Applicant shall complete a road paving program. Scrubber also required on 10 existing generators. Fuel use limited to 210/165 bbl/day (daily/annual average), sulfur content limited to 1.3/1.7% by weight (daily/annual average). Previous permit issued 2/15/78 did not include ammonia technology.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: OIL FIELD - STEAM GENERATORS

NAME/ADDRESS: DOUBLE BARREL OIL COMPANY, BAKERSFIELD, CA Site at Kern County, CA

DETERMINATION IS: CONDITIONAL (FINAL) PENDING: DATE OF ISSUE: 8/10/78 BASIS:* BACT[1] (LAER) BACT[2]
FOR (NEW) MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Oil fired steam generating units (2)	50×10^6 Btu/hr each	SO_2	0.061 lb/10^6 Btu	Flue gas scrubber	95
42 existing steam-drive oil wells		HC	3 lb/day per well	Vapor recovery	99
1000 bbl fuel tank, 750 bbl treating tank and 3 - 1000 bbl shipping tanks		HC		No oil having a true vapor pressure greater than 0.0012 psia at 150°F shall be stored in these tanks	

NOTES: Fuel usage limited to 439 bbl/day on a daily avg. and 372 bbl/day on an annual avg.
Sulfur content of oil limited to 1.2%

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - EXTERNAL COMBUSTION SOURCES 1.0
(OIL FIRED - 1.2)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER
Pacific Oil Company Kern County, CA	$50x10^6$ Btu/hr/steam generators for oil well stimulation	IX	x
Sun Production Company Kern County, CA	$50x10^6$ Btu/hr (as above)	IX	x
Gulf Energy and Minerals Kern County, CA	$30x10^6$ Btu/hr (as above)	IX	x
The HOP Corporation Kern County, CA	$50x10^6$ Btu/hr/as above and vapor recovery on wells	IX	x
Thomas Oil Company Kern County, CA	$50x10^6$ Btu/hr/steam generators and vapor recovery on wells	IX	x
Southern California Edison Co. Laughlin, NV	$350x10^6$ Btu/hr/steam generator - oil field	IX	x
Phillips Petroleum Company Bartlesville, OK	$258x10^6$ Btu/hr (ARDS unit)	VI	x
Chaplin Petroleum Company Houston, TX	6350 lb oil/hr (heater)	VI	x
Hawaiian Electric Company Maui, HI	13.75 MW (generating units)	IX	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: INDUSTRIAL BOILER 263×10^6 Btu/hr

NAME/ADDRESS: MEAD CORPORATION, STEVENSON, AL

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 8/29/78 BASIS:* BACT[1]/(LAER)/BACT[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Wood waste boiler	263×10^6 Btu/hr	TSP	0.0375 gr/dscf	Multiple cyclones	98.5
			at 50% excess air (B)	followed by a high	
				energy wet scrubber	
		NO_x	0.7 lb/10^6 Btu (B)	conservative heat	
				release design and	
				monitor	

NOTES: Offset occurs by the shut down of existing oil fired boiler.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: FUEL BURNING OPERATION

NAME/ADDRESS: JACK DANIEL DISTILLERY, LYNCHBURG, TN

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 8/11/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Boiler No.1 Stoker	$77.x10^6$ Btu/hr[a]	Part	.04 gr/dscf (B)	Mech collector	99
fired		Opacity	20% (B)	Baghouse	
	$66.x10^6$ Btu/hr[b]				
Boiler No.2	$112.x10^6$ Btu/hr[a]			Mech Collection	99
	$96x10^6$ Btu/hr[b]			Baghouse	

NOTES: Boilers designed to burn wood with coal as standby fuel

[a] - Firing - distributor spouts on traveling grates

[b] - Firing - spreader stoker on traveling grates

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: INDUSTRIAL BOILER 498x10^6 Btu/hr

NAME/ADDRESS: FEDERAL PAPERBOARD COMPANY, RIEGELWOOD, N.C.

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/18/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR(NEW)/MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Bark and No.6 oil	498x10^6 Btu/hr	TSP	0.1 lb/10^6 Btu (B)	Multicyclone followed	99+
fired boiler				by Venturi	
		SO_2	0.8 lb/10^6 Btu (B)	Low S coal (1.5% S)	
				plus control by	
				Venturi	

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: STEAM GENERATOR

NAME/ADDRESS: LIHUE PLANTATION COMPANY, LIHUE, HI Site at Lihue, Hawii

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 1/25/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Bagasse-fired steam generator	336,400 lb/hr steam	TSP	90 lb/hr or 0.1 gr/dscf (B)	Multicyclone and wet scrubbing	

NOTES: Fuel oil limited to 10,590 lb/hr, fibrous fuel limited to $11{,}900 \times 10^6$ Btu/day
Sulfur content limited to 0.5% (monthly avg. basis)
Within 180 days of start-up, 9 existing boilers at can processing plant shall be shut down.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: NAPTHA GASIFICATION PLANT

NAME/ADDRESS: TRANSCO ENERGY COMPANY, CHESTER TOWNSHIP, PA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 4/14/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR NEW/MODIFIED SOURCE

BY EPA REGION III (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**		CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Fired Heaters-1 stack		TSP	2.3 lb/hr	(B)	Limiting the S content	
		SO_2	10.8[a]/19.9 lb/hr[b]	(B)	in Naptha to 900 ppmv	
Hydrogen Heaters		TSP	.9 lb/hr	(B)	on a yearly average	
(each stack)		SO_2	4.1[a]/7.6 lb/hr[b]	(B)	and 1500 ppmv on a 4	
Boilers-1 stack	700x10[6] Btu/hr	TSP	24.4 lb/hr	(B)	month average generates	
		SO_2	1435[a]/265.1 lb/hr[b]	(B)	these figures	
Start-Up Heaters		TSP	24.3 lb/yr			
		SO_2	96.0 lb/yr			

NOTES: [a] = Annual average limit
[b] = 120 day average limit

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: FLY ASH HANDLING SYSTEM

NAME/ADDRESS: FLORIDA POWER CORPORATION, ST. PETERSBURG, FL Site at Crystal River, FL

DETERMINATION IS: CONDITIONAL/FINAL/(PENDING); DATE OF ISSUE: _____ BASIS:* BACT[1]/LAER/(BACT[2])
FOR NEW/(MODIFIED) SOURCE

BY EPA REGION IV _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Transfer Silo					
Source 1	44 ton/hr	TSP	3.52 ton/hr (B)	Fabric filter	99.9
Source 2	6.97 ton/hr	TSP	0.03 ton/hr (B)	Fabric filter	99.9
Storage Silo	10 ton/hr	TSP	0.57 ton/hr (B)	Fabric filter	99.9

NOTES: Construction is exempt from control technology review, but not from impact analysis requirements.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: LNG IMPORT TERMINAL

NAME/ADDRESS: TRUCKLINE LNG COMPANY, HOUSTON, TX Site at Lake Charles, LA

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: _____ BASIS:* BACT[1]/LAER/BACT[2]
FOR NEW/MODIFIED SOURCE

BY EPA REGION VI
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Fuel Gas Heaters	2 at .63 lb/hr	NO_x	1.26 lb/hr (B)	Proper design	
Vaporizers	7 at 3.86 lb/hr	NO_x	27.02 lb/hr (B)	Proper design	
Gas Turbine		NO_x	48.7 lb/hr (N)	Water injection	

NOTES: Source is required to comply with NSPS for gas turbines

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - EXTERNAL COMBUSTION SOURCES 1.0

(OTHER - 1.3)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER
Simonson Lumber Company Smith River, CA	80,000 lb steam/hr wood fired boilers	IX	x
West Vaco Corporation Wickliffe, KY	634×10^6 Btu/hr/bark/wood fired boilers	IV	x
Paul Bunyan Lumber Company Anderson, CA	7.1 ton/hr/wood fired boiler	IX	x

2.0 SOLID WASTE DISPOSAL

2.1 Refuse incineration (liquid, solid)

2.2 Sewage sludge incineration

2.3 Other - auto body, pathological, etc.

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: SOLID WASTE DISPOSAL 250 ton/day

NAME/ADDRESS: GLEN COVE COMPANY, GLEN COVE, NY

DETERMINATION IS: CONDITIONAL/FINAL/(PENDING) DATE OF ISSUE: _____ BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION II (Agency) Mike Davis (Person) 8-264-9578 (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Incinerator	250 ton/day	PM	0.05 gr/dscf at 12%	ESP	97
			CO_2 and 20% opacity	(1) No controls required	
Incinerator	250 ton/day	SO_2		(2) Combustion parameters	
Incinerator	250 ton/day	NO_x		(3) Combustion parameters	
Incinerator	250 ton/day	CO	< 1000 ppm		

NOTES: (1) SO_2 concentration too low to effectively use FGD devices.

(2) Excess air 120%, combustion temperature - 1000° F.

(3) Heat release rate - 1400 Btu/hr/ft^3 - combined temperature between 1600°F-1800°F - O_2 between 10-12%.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: RESOURCE RECOVERY FACILITY 3000 ton/day

NAME/ADDRESS: ENVIRONMENTAL RESOURCES MANAGEMENT Site at Dade County, FL

DETERMINATION IS: (CONDITIONAL)/FINAL/PENDING: DATE OF ISSUE: 3/30/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Boilers 1&2,3&4		TSP	.08 gr/dscf (N)	ESP	
Glass dryer and		SO_2		Low S ($\leq$ .8%) fuel used	
Pathological				during start up	
Incinerator					

NOTES: Applicant must furnish proof to EPA that source emits less than 100 ton/year of HC

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: LIQUID WASTE BURNER 1.09 tons/hour

NAME/ADDRESS: L.W.D.,INC., CLAY, KY Plant site - Calvert City, KY

DETERMINATION IS: CONDITIONAL (FINAL) PENDING: DATE OF ISSUE: 8/18/78 BASIS:* BACT[1] /LAER (BACT[2])
FOR (NEW) MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Waste Burner	109 tons/hr	TSP	0.2 gr/dscf (S)	Plenum chamber, Venturi	99
				scrubber and packed	
				scrubber	

NOTES: Conditions - unit shall operate with the complete control equipment in operating phase when any waste is being processed - 2185 lbs/hr maximum weight of liquid waste to be burned.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - SOLID WASTE DISPOSAL 2.0
(REFUSE INCINERATION [LIQUID, SOLID] - 2.1)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: SLUDGE INCINERATOR

NAME/ADDRESS: HUNTINGTON, W. VA.

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/21/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Incinerator	7800 lb/hr	TSP	1.6 lb/ton dry sludge	Venturi scrubber with	99
	wet sludge		.93 lb/hr (N)	pressure drop of 20"	
				water	

NOTES: This is a PSD source. Since controlled emissions of particulate will be less than 50 ton/yr no modeling for PSD is necessary, only a BACT determination.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - SOLID WASTE DISPOSAL 2.0
(SEWAGE SLUDGE INCINERATION - 2.2)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

ADDITIONAL DETERMINATIONS - SOLID WASTE DISPOSAL 2.0
(OTHER - AUTO BODY, PATHOLOGICAL, ETC. 2.3)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

3.0 INTERNAL COMBUSTION

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: NATURAL GAS COMPRESSOR STATION/23,000 HORSEPOWER

NAME/ADDRESS: TENNESSEE GAS PIPELINE, P.O. BOX 2511, HOUSTON, TEXAS 77001

DETERMINATION IS: (CONDITIONAL) FINAL/PENDING: DATE OF ISSUE: 1/26/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
General Electric	2 billion cubic	Nitrogen oxides	39.0 lb/hr (B)	Water Injection:	47.2
11,500 horsepower	feet per day ea.	(NO_x)	for each turbine	monitored water/fuel	
regenerative turbine				ratio and consumption	
gas compressors (2)				rates	
Electric generator		Nitrogen oxides	3.64 lb/hr (B)	controlled parameters	
with 150 HP gas		(NO_x)		for ignition timing	
engine				and fuel/air ratio	
				rates	

NOTES: Use of the electric generator is limited to 1 hr per week for maintenance.
Continuous operation will be permitted only in the event of outside power failure.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: NATURAL GAS COMPRESSOR STATION ENGINE/7250 HP

NAME/ADDRESS: NATURAL GAS PIPELINE COMPANY OF AMERICA, 122 S. MICHIGAN AVE., CHICAGO, IL 60603

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 1/9/79 BASIS:* BACT[1]/LAER/BACT[2]
FOR NEW/MODIFIED SOURCE

BY EPA REGION V (Agency) Joe Winkler (Person) 214-767-2742 (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff.,%
Compressor Engine	444 MMSCF/D	Nitrogen Oxides	Standard-1075 T/Y (B)	None	
Unit No.8			Clean Burn-230 T/Y (B)	Engine Modification	79

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - INTERNAL COMBUSTION 3.0

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER
Tennessee Gas Pipeline Houston, TX	11,500 HP/gas turbine	VI	x

4.0 EVAPORATIVE LOSS

- 4.1 Surface coating
- 4.2 Petroleum liquids storage
- 4.3 Transportation and marketing of petroleum liquids
- 4.4 Other

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: SURFACE COATING 66 CARS/HOUR

NAME/ADDRESS: VOLKSWAGEN MANUFACTURING CORPORATION OF AMERICA, WESTMORELAND COUNTY, NEW STANTON, PA

DETERMINATION IS: (CONDITIONAL) / FINAL / PENDING: DATE OF ISSUE: 10/6/77 BASIS:* BACT[1] / (LAER) / BACT[2]
FOR (NEW) / MODIFIED SOURCE

BY EPA REGION III
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Volkswagen Plant	66 cars/hr	NMHC	Start-up 599 tons/yr	(L) See attachment	
			1st modification 927	tons/yr (L)	
			2nd modification 814	tons/yr (L)	
			3rd modification 656	tons/yr (L)	
			4th modification 493	tons/yr (L)	

NOTES: SIP revision was required in this application. As part of the offset policy, the pavement maintenances of PennDOT were changed in order to reduce the hydrocarbon emissions enough to compensate for the increase that would result from the Volkswagen operation. (See special conditions - page 2)

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

Volkswagen Manufacturing Corporation of America
Westmoreland County, New Stanton, Pennsylvania

SPECIAL CONDITIONS

1. Production is to be limited to one eight-hour shift per day, five days per week, with hydrocarbon emissions at an estimated maximum of 4,795 pounds per day, until the first modification of the painting process is made. This modification consists of increasing the solids content of metallic base coat from 15% to 30% and of the clear coat from 34.8% to 45% which is designated to reduce total hydrocarbon emissions to an estimated maximum of 3710 pounds per eight-hour shift.

2. On or before December 31, 1979, implement the modification described in item 1 above and eliminate the sealer coat which is designed to reduce total hydrocarbon emissions from the plant from an estimated maximum of 4795 pounds per eight hour shift to an estimated maximum of 3255 pounds per eight hour shift.

3. On or before December 31, 1980, change to water-borne spray primer (20% organic solvent, 23.5% water) and a water-borne sealer (20% organic solvent, 28.3% water). These modifications are designed to reduce total hydrocarbon emissions from the plant from an estimated maximum of 3255 pounds per eight hour shift to an estimated maximum of 2624 pounds per eight hour shift.

4. On or before December 31, 1981, increase solids content of top-coat to 80%. This final modification is designed to reduce the total hydrocarbon emissions from the plant to an estimated maximum of 1971 pounds per eight hour shift.

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: (7) WIRE ENAMELING OVENS

NAME/ADDRESS: PHELPS DODGE MAGNETIC WIRE COMPANY, HOPKINSVILLE, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 11/17/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Wire enameling ovens (7)	47.1 lb/hr each	VOC	8 lb/hr (B)	dual incineration	≥ 90

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: UREA SURFACE COATING 60 TONS/HOUR

NAME/ADDRESS: AG INDUSTRIES, COLUMBIA, ALABAMA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/18/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Surface Coating	60 tons/hr	TSP	5.9 lb/hr (B)	Two scrubbers, two cyclones and a baghouse	99.9
Urea Unloading		TSP		Controls on hours of operation	
Rail car loading					
Boiler					

NOTES: Area coating operations must be limited to $\leq$ 8400 hr/yr, unloading must be limited $\leq$ 2000 hrs/yr, rail car loading must be limited to $\leq$ 4000 hrs/yr, boiler operations must be limited to $\leq$ 8400 hrs/yr. A record of these hours must be recorded in a form suitable for inspection.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: RIBBON COATING 1300 FT/MIN

NAME/ADDRESS: IBM LEXINGTON, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 7/21/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Ribbon Coaters (new) (2)	500 ft/min each	HC	9.23 lb/hr (L)	Hooding and carbon ad-	95
				sorption	
Solvent Recovery		HC	5.2 lb/hr (L)	None	
System (New)					
Coater (modification)		HC	28.4 lb/hr (L)	Not given	88
Emission Reduction		HC	17.9 lb/hr (L)	2 incinerators and waste	70
required on three coaters			(reduction of 281.6	heat boiler	
(added controls)			ton/year)		

NOTES: Conditions (1) Maximum usage of mixed ink including organic solvents not to exceed 584 lb/hr and 1889 tons/yr; (2) Hours of operation shall not exceed 21.5 hr/day, 301 days/yr. Hours of operation for process B shall not exceed 3517 hrs/yr.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ROTOGRAVURE PRINTING PRESS

NAME/ADDRESS: MEAD PACKAGING, ATLANTA, GA Site at Buena Park, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 4/28/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Printing press	6000 lb/solvent per day	VOC	78 tons/yr (B)	Thermal oxidizer	90

NOTES: Permit limits operation of 6240 hr/yr. Source was determined to be exempt from air quality impact analysis.

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ADDITIONAL DETERMINATIONS - EVAPORATIVE LOSS 4.0
(SURFACE COATING 4.1)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROLEUM REFINERY 22,000 BBL/DAY CRUDE OIL

NAME/ADDRESS: FLETCHER OIL AND REFINING COMPANY, CARSON, CA Site at Carson, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 9/6/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Floating roof storage		HC		Internal double seal	
tanks (8)				floating roofs	
Fixed roof tank		HC		Vapor recovery	
Truck loading		HC		Vapor recovery	
FCC Unit		TSP		Cyclones + ESP	
		CO	5.6 lb/hr (max 2 hr avg)		
Pumps		HC	510 lb/day	Mechanical seals	
Valves		HC	840 lb/day		

NOTES: Closed wastewater separators required. Detailed list of proposed equipment and requirements given in permit. S content of fuel limited to 0.1 gr/dscf. Applicant required to remove existing internal combustion engines, boilers and 7 storage tanks 180 days after start up.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROLEUM REFINERY 22,000 BBL/DAY CRUDE OIL

NAME/ADDRESS: FLETCHER OIL AND REFINING COMPANY, CARSON, CA Site at Carson, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 9/6/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Compressors		HC	150 lb/day		
Process heaters and boilers		NO_2	0.07 lb/10^6 Btu(2 hr avg)	Low NO_x burners or ammonia injection	
Existing heaters (4)	Limited to 423x10^6 Btu/hr of refinery gas only	NO_2	0.09 lb/10^6 Btu(2 hr avg)	required for all fuel gas combustion devices	
Sulfur recovery plant		SO_2	2.1 lb/hr (2 hr avg)	Shall receive all hydrocarbon sulfide gas recovered from refinery process	

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROLEUM REFINERY

NAME/ADDRESS: CIBRO PETROLEUM PRODUCTS CORPORATION, ALBANY, NY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 9/27/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION II
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff.,%
Petroleum storage tanks		HC	No numerical limit (B)	Double seal floating roofs	95
Process relief valves		HC	No numerical limit (B)	Flare	
API separators		HC	No numerical limit (B)	Enclosures	
Pumps and compressors		HC	No numerical limit (B)	Mechanical seals	

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - EVAPORATIVE LOSS 4.0
(PETROLEUM LIQUIDS STORAGE 4.2)

NAME - LOCATION	SIZE	REGION	BACT/LAER

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: CRUDE OIL TOPPING PLANT 10,000 BBL/DAY

NAME/ADDRESS: COASTAL PETROLEUM REFINERIES, INC., SANTA ANNA, CA Site at Kern County, CA

DETERMINATION IS: CONDITIONAL (FINAL) PENDING: DATE OF ISSUE: _____ BASIS:* BACT[1] (LAER) BACT[2]
FOR (NEW) MODIFIED SOURCE

BY EPA REGION IX _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Crude oil tanks,		HC	0 (L)	HC vapor recovery and	100
naptha tanks and truck				incineration	
loading and unloading					

NOTES: Fuel usage limited to 0.45×10^6 ft^3/day natural gas or 1,320 gal/day oil. Sulfur content of fuel limited to 1.3% by weight. Facility determined to be a minor source under conditions of permit.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROLEUM STORAGE AND TRANSFER FACILITY

NAME/ADDRESS: PACTEX PIPELINE COMPANY, LONG BEACH, CA

DETERMINATION IS: CONDITIONAL (FINAL) PENDING: DATE OF ISSUE: 10/13/78 BASIS:* BACT[1] (LAER) BACT[2]
FOR (NEW) MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff.,%
Crude oil storage	615,000 bbl each			Double seal floating roof	
tanks (8)				technology	
Tanker unloading				Detailed requirements	
				(see permit)	
Two berth marine	500,000 bbl/day			Detailed requirements	
terminal				(see permit)	
Pump stations (2)					
Related facilities					

NOTES: Applicant shall obtain emission offsets of 1059 lb/day for VOC and 3980 lb/day of NO_x in the Los Angeles Metropolitan Air Quality Control Region.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - EVAPORATIVE LOSS 4.0
(TRANSPORTATION AND MARKETING OF PETROLEUM LIQUIDS 4.3)

NAME - LOCATION	SIZE	REGION	BACT/LAER

ADDITIONAL DETERMINATIONS - EVAPORATIVE LOSS 4.0
(OTHER 4.4)

NAME - LOCATION	SIZE	REGION	BACT/LAER

5.0 CHEMICAL PROCESS INDUSTRIES

5.1 Acid manufacture
5.2 Carbon black
5.3 Charcoal
5.4 Paint and varnish
5.5 Sulfur and sulfur recovery
5.6 Other - explosives, etc.

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: BORIC ACID PLANT — 685 TON/DAY

NAME/ADDRESS: U.S. BORAX AND CHEMICAL COMPANY, LOS ANGELES, CA — Site at Boron, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/18/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Steam boiler	150×10^3 lb/hr steam		SO_2	Oil use limited to 840 bbl/day of <0.5% S oil	
Impact mill	85 ton/hr ore feed	TSP	0.003 lb/ton of ore feed to the mill	Baghouse [a]	99.5
Product dryers (3)	Total product processed = 28.5 ton/hr	TSP	0.067 lb/ton of ore feed to boric acid plant	Baghouse [a]	99
Product handling		TSP	0.035 lb/ton product	Enclosed operation and fabric filter as above	99.7
Bulk rail loadout	5 cars/day	TSP	2.0 lb/rail car loaded		99.7

NOTES: [a] Permit amended on 7/19/78 to allow use of baghouses with efficiency of 99.5% on product dryers and impact mill rather than scrubbers as originally proposed. Water spray shall be used to control fugitive emissions.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PHOSPHATE FERTILIZER CHEMICAL COMPLEX EXPANSION /2000 TON/DAY

NAME/ADDRESS: OXIDENTAL CHEMICAL COMPANY, WHITE SPRINGS FL

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 2/2/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
New contact type		SO_2	333 lb/hr		
double absorption	2000 ton/day	H_2SO_4 Mist	12.5 lb/hr (N)	Mist Eliminator	99+
sulfuric acid plant					
Fossil-fuel-fired	125×10^6 MMBtu/hr	SO_2	(B)	Low sulfur oil	
steam generator		Part	(B)		
Vacuum evaporation					
super phosphoric	700 ton/day	SiF_4	0.29 lb/hr (N)	Venturi scrubber	
acid (SPA) plant		(silicon tetra-flouride)			

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PHOSPHATE FERTILIZER CHEMICAL COMPLEX EXPANSION /2000TON/DAY

NAME/ADDRESS: OXIDENTAL CHEMICAL COMPANY, WHITE SPRINGS, FL

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 2/2/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Fossil fuel-fired		Part			
steam generator	75,000 lb/hr	SO_2	(B)	Low sulfur oil	
		SiF_4			
Phosphoric Acid Train	1500 ton/day	SiF_4	1.54 lb/hr (N)	Hoods and cyclone scrubber	99.9%
		Part	46 lb/hr (N)	baghouse	99.8

NOTES:

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ADDITIONAL DETERMINATIONS - CHEMICAL PROCESS INDUSTRIES 5.0
(ACID MANUFACTURE 5.1)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: CARBON BLACK PLANT 63×10^6 LB/YR

NAME/ADDRESS: CONTINENTAL CARBON COMPANY, PHENIX CITY, AL

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 3/30/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY _____ _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Proposed Expansion Facilities	53×10^6 lb/yr Reactor rated at 6.5 TPH	SO_2			
A. Main bag filter		Particulate	0.95 lb/hr	Baghouse [a]	99.9
B. Exhaust bag filter		Particulate	0.13 lb/hr	Baghouse [b]	99.9
C. Firebox stack		Particulate	1.26 lb/hr		
D. Oil preheater		Particulate	0.60 lb/hr		

NOTES: [a] 22,400 SCFM, pressure drop = 4" water, Air/cloth ratio = 1.13
[b] 5,000 SCFM, pressure drop = 7" water, Air/cloth ratio = 1.15
Feedstock oil and liquid fuel shall not exceed 1.6% sulfur by weight.

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** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: CARBON BLACK PLANT 63×10^6 LB/YR

NAME/ADDRESS: CONTINENTAL CARBON COMPANY, PHENIX CITY, AL

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 3/30/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY _____ (Agency) _____ (Person) _____ (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff.,%
Existing Facilities					
E. Air and Oil Preheater		Particulate	2.34 lb/hr		
F. Exhaust bag filter		Particulate	0.077 lb/hr		
G. Firebox stack		Particulate	0.92 lb/hr		
H. Firebox stack		Particulate	0.92 lb/hr		

NOTES: _____

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ADDITIONAL DETERMINATIONS - CHEMICAL PROCESS INDUSTRIES 5.0
(CARBON BLACK 5.2)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

ADDITIONAL DETERMINATIONS - CHEMICAL PROCESS INDUSTRIES 5.0
(CHARCOAL - 5.3)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

ADDITIONAL DETERMINATIONS - CHEMICAL PROCESS INDUSTRIES 5.0
(PAINT AND VARNISH - 5.4)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: NATURAL GAS DESULFURIZATION PLANT

NAME/ADDRESS: ALKALI GULCH GAS PROCESSING PLANT (POLUMBUS CORPORATION) KLINE, CO

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/29/76 ** BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VIII (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
	5 mmcf/day of	SO_2	BACT defined as a 99%	(Equipment not specified in permit	
	natural gas		overall sulfur recovery	but is described on reverse side	
				of this sheet)	
			Install and operate SO_2	continuous monitoring on	
			oxidizer stack		
			Maintain file of all measurements, quantity of gas handled,		
			H_2S content recorded daily, malfunctions, etc.		

** NOTES: Permit modified on 2/28/78 because of violations. Additional conditions: Submit quarterly excess emission report, (6 hr avg. must be 99% removal); maintain and operate facility in good air pollution control practice. Adhere to operating procedures.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

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Alkali Gulch Gas Process Plant (Polumbus Corporation)
Kline, CO

Capture of sulfur compounds will be accomplished using AMOCO Claus process followed by a Shell Claus off-gas treating unit. Sulfur removal efficiencies are calculated to be 95.6% and 94.9% respectively, resulting 99.8% overall removal efficiency. Residual H_2S emissions are converted to SO_2 in thermal oxidizer. Total emissions are calculated to be 46.3 tons SO_2/year if H_2S content averages 15%.

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: SULFUR RECOVERY PLANT (REFINERY)

NAME/ADDRESS: SKILLY OIL COMPANY, EL DORADO, KS

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 7/16/76 BASIS:* (BACT[1])/LAER/BACT[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VII
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Because emissions from the new sulfur recovery unit will be vented through a new incinerator, which provides a portion of the emission control for the affected facility, a SO_2 emission limit cannot be specified for the exhaust from the sulfur recovery unit. Also waste gases from processes other than the new Claus sulfur recovery unit will be treated in the new incinerator. It has been determined that it is unfeasible to specify an emission standard on the sulfur recovery unit. Thus, an equipment standard is being specified as a condition of approval of the application. The equipment shall consist of a 3 stage Claus sulfur recovery unit with tail-gas incineration.					
S Recovery Unit	120 tons of elemental sulfur/day		(95% efficiency estimated)		

NOTES:

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ADDITIONAL DETERMINATIONS - CHEMICAL PROCESS INDUSTRIES 5.0
(SULFUR AND SULFUR RECOVERY - 5.5)

NAME - LOCATION	SIZE /FACILITIES	REGION	BACT/LAER
Colorado Interstate Gas Company Sweetwater County, WY	60×10^6 cf/d (sulfur recovery)	VIII	x
Mountain Fuel Supply Company Vinta County, WY	12.5×10^6 cf/d (sulfur recovery)	VIII	x
Shell Oil Company Manistee, MI	45×10^6 cf/d (sulfur recovery)	V	x
Husky Oil Company Cheyenne, WY	30,000 bbl/day (sulfur recovery and coking plant)	VIII	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: MISSISSIPPI ARMY AMMUNITION PLANT (BAY ST. LOUIS, MS)

NAME/ADDRESS: NATIONAL SPACE TECHNOLOGY LABORATORIES, HANCOCK COUNTY, MS

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 9/22/78 BASIS:* BACT[1]/LAER/(BACT[2])

FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) _____ (Person) _____ (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Projectile metal parts		Part	13.2 lb/hr (B)		
manufacturing area		SO_2	21.3 lb/hr (B)		
		NO_x	42.3 lb/hr (B)		
		HC	27.5 lb/hr (B)		
Cargo metal parts		Part	7.7 lb/hr (B)		
manufacturing area		SO_2	23.5 lb/hr (B)		
		NO_x	45.6 lb/hr (B)		
		HC	16.8 lb/hr (B)		

NOTES: _____

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** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: MISSISSIPPI ARMY AMMUNITION PLANT (BAY ST. LOUIS, MS)

NAME/ADDRESS: NATIONAL SPACE TECHNOLOGY LABORATORIES, HANCOCK COUNTY, MS

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 9/22/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Load, assemble and		Part	1.2 lb/hr (B)		
pack areas					
Explosive waste		Part	0.077 lb/hr per		
incinerators			incinerator		
Coal-fired boilers		Part	0.05 lb/MM Btu		
		SO_2	1.0 lb/MM Btu		
		NO_x	0.7 lb/MM Btu		

NOTES:

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** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: MISSISSIPPI ARMY AMMUNITION PLANT (BAY ST. LOUIS, MS)

NAME/ADDRESS: NATIONAL SPACE TECHNOLOGY LABORATORIES, HANCOCK COUNTY, MS

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 9/22/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Diesel electric		Part	6.8 lb/hr		
generators		SO_2	34.0 lb/hr		
		NO_x	405.0 lb/hr		
		NC	146.0 lb/hr		
Inert waste		Part	0.03 lb/hr per incinerator[a]		
incinerators					

NOTES: [a] Only one unit may be operated at a time. All controls are BACT and 40 CFR 52.21

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROCHEMICAL COMPLEX / 400×10^6 LB/YEAR OF ACRYLONITRILE

NAME/ADDRESS: VISTRON CORPORATION, MIDLAND BLDG., CLEVELAND, OH Site at Calhoun County, TX

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/5/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE
BY EPA REGION VI
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Acrylonitrile Facility					
Waste gas incinerators		NO_x	8 lb/hr (B)	Incineration and	99.5
		CO	121 lb/hr (B)	combustion controls[a]	
		HC	5.5 lb/hr (B)		
HCN by-product		NO_x	400 lb/hr (B)	Incineration and	
incinerator		CO	121.9 lb/hr (B)	combustion controls[a]	99.5
		HC	6.0 lb/hr (B)		
Catalyst hopper		TSP	<0.1 lb/hr (B)	Cyclone and catalyst trap	

NOTES: [a] Combustion controls consist of low excess air firing, staged combustion, continuous flue gas oxygen monitor/controller, control of combustion air/fuel ratio, boiler and burner design to produce low intensity flames, etc.

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SOURCE TYPE/SIZE: PETROCHEMICAL COMPLEX

NAME/ADDRESS: VISTRON CORPORATION, MIDLAND BLDG., CLEVELAND, OH Site at Calhoun County, TX

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/5/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Acrylates Facility	275×10^6 lb/yr				
Waste gas incinerator		NO_x	20 lb/hr (B)	Combustion controls	
		CO	18.4 lb/hr (B)	Combustion controls	
		SO_2	6.5 lb/hr (B)	Low sulfur fuel	
		TSP	0.9 lb/hr (B)		
Waste water incinerator		NO_x	41.7 lb/hr (B)	Combustion controls	
		CO	3.2 lb/hr (B)	Combustion controls	
		SO_2	33.1 lb/hr (B)	Low sulfur fuel	
		TSP	4.1 lb/hr (B)		

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROCHEMICAL COMPLEX

NAME/ADDRESS: VISTRON CORPORATION, MIDLAND BLDG., CLEVELAND, OH Site at Calhoun County, TX

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/5/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Methyl Methacrolate	150×10^6 lb/yr				
Waste gas incinerator		NO_x	15 lb/hr (B)	Combustion controls	
		CO	13.8 lb/hr (B)	Combustion controls	
		SO_2	4.9 lb/hr (B)	Low sulfur fuel	
		TSP	0.7 lb/hr (B)		
Waste water incinerator		NO_x	30.0 lb/hr (B)	Combustion controls	
		CO	2.2 lb/hr (B)	Combustion controls	
		SO_2	23.5 lb/hr (B)	Low sulfur fuel	
		TSP	2.9 lb/hr (B)		

NOTES:

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** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

SOURCE TYPE/SIZE: PETROCHEMICAL COMPLEX

NAME/ADDRESS: VISTRON CORPORATION, MIDLAND BLDG., CLEVELAND, OH — Site at Calhoun County, TX

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/5/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Barex (R) Resin Facility	30×10^6 lb/yr				
Thermal oxidizer		NO_x	1.7 lb/hr (B)	Combustion controls	
		CO	0.6 lb/hr (B)		
Acrylamide facility	30×10^6 lb/yr				
Waste gas incinerator		NO_x	19.2 lb/hr (B)	Combustion controls	
		CO	3.4 lb/hr (B)	Combustion controls	
		SO_2	1.2 lb/hr (B)	Low sulfur fuel	
		TSP	0.2 lb/hr (B)		

NOTES:

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** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROCHEMICAL COMPLEX

NAME/ADDRESS: VISTRON CORPORATION, MIDLAND BLDG., CLEVELAND, OH — Site at Calhoun County, TX

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/5/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Olefin Facility	1300×10^6 lb/yr				
Heaters		NO_x	20 lb/hr (B)	Combustion controls	
		CO	4.3 lb/hr (B)	Combustion controls	
		SO_2	52.9 lb/hr (B)	Low sulfur fuel	
		TSP	10.3 lb/hr (B)		
Sulfur recovery unit		SO_2	30.8 lb/hr (B)	Sulfur recovery unit	99.5

NOTES:

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SOURCE TYPE/SIZE: PETROCHEMICAL COMPLEX

NAME/ADDRESS: VISTRON CORPORATION, MIDLAND BLDG., CLEVELAND, OH Site at Calhoun County, TX

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/5/79 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Ammonia Facility	1250 ton/day				
Reformer heaters		NO_x	82.5 lb/hr (B)	Combustion controls	
		CO	17.0 lb/hr (B)	Combustion controls	
		SO_2	162.1 lb/hr (B)	Low sulfur fuel	
		TSP	7.5 lb/hr (B)		
Carbon dioxide stripper		CO	0.4 lb/hr (B)	Combustion controls	

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROCHEMICAL COMPLEX

NAME/ADDRESS: VISTRON CORPORATION, MIDLAND BLDG., CLEVELAND, OH Site at Calhoun County, TX

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/5/79 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Urea-granulator/evaporator		TSP	18.2 lb/hr (B)	Scrubber	70-95
Nitric acid absorber	300 ton/day	NO_x	19.2 lb/hr (B)	Extended absorption	
	waste gas				
Ammonium Nitrate		TSP	4.0 lb/hr (B)	Mist eliminator	95
neutralizer					
Synthesis gas vent		CO	114.2 lb/hr (B)	Incinerator	
		SO_2	2.9 lb/hr (B)	Low sulfur fuel	
High sulfur flue gas		SO_2	96.1 lb/hr (B)	Sulfur recovery unit with tail gas clean-up	95.5

NOTES:

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SOURCE TYPE/SIZE: PETROCHEMICAL COMPLEX

NAME/ADDRESS: VISTRON CORPORATION, MIDLAND BLDG., CLEVELAND, OH Site at Calhoun County, TX

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/5/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Phthalic Anhydride Facility	180×10^6 lb/yr				
Waste gas incinerator		CO	5.7 lb/hr (B)	Combustion controls	
		SO_2	34.7 lb/hr (B)	Low sulfur fuel	
		TSP	5.3 lb/hr (B)	Scrubber	50
Utility boilers	600×10^6 Btu/hr	NO_x	178.6 lb/hr (B)	Combustion controls	
		CO	21.5 lb/hr (B)	Combustion controls	
		SO_2	439.4 lb/hr (B)	Low sulfur fuel	
		TSP	40.8 lb/hr (B)		

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: EXPANSION OF SILICONE CHEMICAL MANUFACTURING PLANT/115x10^6 LB/YEAR OF CRUDE SILICONE

NAME/ADDRESS: DOW CORNING CORPORATION, CARROLLTON, KY

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 11/17/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR NEW/MODIFIED SOURCE

BY EPA REGION IV/KENTUCKY DEPARTMENT OF NATURAL RESOURCES _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Silicone grinding,	Permit limits	TSP	Opacity - 20%		
screening and convey-	grinder to				
ing	39x10^6 lb/yr				
Catalyst transfer (2)		TSP	Opacity - 20%		
Methyl Chloride		HC	60 lb/hr	Shall be equipped with a control device	
recovery				at lease 98.3% by weight design efficiency.	
Fume Incinerator		HC		Shall be designed to provide an incinera-	
				tion efficiency for HC of at least 99%	

NOTES: Total plant production limited to 115x10^6 lb/yr of crude silicone

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: EXPANSION OF SILICONE CHEMICAL MANUFACTURING PLANT/115x10^6 LB/YEAR OF CRUDE SILICONE

NAME/ADDRESS: DOW CORNING CORPORATION, CARROLLTON, KY

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 11/17/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR NEW/MODIFIED SOURCE

BY EPA REGION IV/KENTUCKY DEPARTMENT OF NATURAL RESOURCES
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Fume Incinerator (continued)		HCl	5 ppm (exhaust stack)	Shall be scrubbed by a suitable	
				medium such that emissions do not	
				exceed 5 ppm in exhaust stack	
Methyl Chloride Unit				Shall be vented to fume	
(Existing Facility)				incinerator	
Chlorosilane Vent		HCl		All scrubbers for HCl controls	
recovery, HCL Unit				shall provide greater than 99%	
Blowdown system, Pilot Plant, and Process C-3				efficiency	

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: EXPANSION OF SILICONE CHEMICAL MANUFACTURING PLANT/115x10^6 LB/YEAR OF CRUDE SILICONE

NAME/ADDRESS: DOW CORNING CORPORATION, CARROLLTON, KY

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 11/17/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR NEW/MODIFIED SOURCE

BY EPA REGION IV/KENTUCKY DEPARTMENT OF NATURAL RESOURCES
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Methyl Chloride Unit, Secondary recovery process		HC	16 lb/hr	Shall be equipped with a control device of at least 99% efficiency by weight.	
Pumps and compressors		HC (fugitives)		All pumps and compressors handling HC materials shall have mechanical seals or other equipment of equivalent or greater efficiency for the prevention of fugitive emissions.	

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: HERBICIDES MANUFACTURING $30x10^6$ LB/YEAR

NAME/ADDRESS: MONSANTO CHEMICALS, AGUIRRE, PR

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/17/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION II
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Boiler No.6 oil	$60x10^6$ Btu/hr	SO_2	2.5% S (B)	2.5% S	
		TSP, NO_x, HC	20% opacity (B)	Combustion parameters	
Incinerator aqueous	5000 lb/hr	TSP, NO_x, HC	20% opacity (B)	Combustion parameters	
waste					
Product handling	$30x10^6$ lb/hr	TSP	99.9% (B)	Baghouse	99.9
Reactors	$30x10^6$ lb/hr	TSP, HC	20% opacity (B)	Scrubbers	95%

NOTES:

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ADDITIONAL DETERMINATIONS - CHEMICAL PROCESS INDUSTRIES 5.0
(OTHER - EXPLOSIVES - 5.6)

NAME - LOCATION	SIZE /FACILITY	REGION	BACT/LAER
Hercules, Inc. Kenvil, NJ	2500 ton/yr/dryer	II	x

6.0 FOOD AND AGRICULTURAL INDUSTRIES

- 6.1 Alfalfa dehydrating
- 6.2 Feed/grain mills and elevators
- 6.3 Fertilizer
- 6.4 Other

ADDITIONAL DETERMINATIONS - FOOD AND AGRICULTURAL INDUSTRIES 6.0
(ALFALFA DEHYDRATING - 6.1)

NAME - LOCATION	SIZE	REGION	BACT/LAER

ADDITIONAL DETERMINATIONS - FOOD AND AGRICULTURAL INDUSTRIES 6.0
(FEED/GRAIN MILLS AND ELEVATORS - 6.2)

NAME - LOCATION	SIZE	REGION	BACT/LAER

ADDITIONAL DETERMINATIONS - FOOD AND AGRICULTURAL INDUSTRIES 6.0
(FERTILIZER - 6.3)

NAME - LOCATION	SIZE	REGION	BACT/LAER

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ALMOND HULLING PLANT

NAME/ADDRESS: GETTY OIL COMPANY, BAKERSFIELD, CA Site at Kern County, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 9/25/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Pre-cleaning	30 ton/hr	TSP	13.44 lb/hr total for plant	Fabric filter	
Hulling	5 ton/hr	TSP		Fabric filter	

NOTES: Getty shall operate the plant no more than 90 days/year

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: FOOD PROCESSING (GELATINE PRODUCTION)

NAME/ADDRESS: KNOX GELATINE, INC., KING & KNOX DIVISION, SIOUX CITY, IA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/14/78 BASIS:* BACT[1] /(LAER)/ BACT[2]
FOR (NEW)/MODIFIED SOURCE

BY IOWA DEPARTMENT OF ENVIRONMENTAL QUALITY
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Kiln dryer	3300 lb/hr	TSP	0.02 gr/dscf or (L)	Hi-energy Venturii[a]	98.5
	(dicalcium		0.5 lb/hr	after product recovery	
	phosphate)			cyclone	
Materials handling	3300 lb/hr	TSP	0.02 gr/dscf or (L)	Bag filter[b]	99+
			1.33 lb/hr		

NOTES: [a] Air volume = 6000 ACFM at 115° F; Pressure drop = 30 in. WG: Inlet to collector = 33 lb/hr.

[b] Air volume = 8200 ACFM at 90° F; Air to cloth ratio (design max.) = 9 to 1 (actual = 6.9 to 1). Inlet to collector = 133 lb/hr. Permit has special conditions requiring off-set.

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ADDITIONAL DETERMINATIONS - FOOD AND AGRICULTURAL INDUSTRIES 6.0
(OTHER - 6.4)

NAME - LOCATION	SIZE	REGION	BACT/LAER

7.0 METALLURGICAL INDUSTRIES

- 7.1 Primary aluminum
- 7.2 Metallurgical coke
- 7.3 Ferroalloy
- 7.4 Foundries - gray iron, steel, non-ferrous
- 7.5 Iron and steel mills
- 7.6 Primary smelters - copper, lead, zinc
- 7.7 Secondary metal processing - aluminum, lead, zinc
- 7.8 Other

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ALUMINUM REDUCTION PLANT /185,000 TON/YEAR

NAME/ADDRESS: MARTIN MARIETTA CORPORATION, GOLDENDALE, WA 98620

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 8/30/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION X (Agency) Paul Boys (Person) (206) 442-1106 (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Reduction cells (526)	[a] 507 short	TSP	2028 lb/day and	Flakt wet scrubber	99.9
	ton/day		4 lb/TAL (B)		
		SO_2	7077 lb/day and	Flakt wet scrubber	90.9
			13.97 lb/TAL (B)		
		Fluorides	656 lb/day and	Flakt wet scrubber	99.9
			1.3 lb/TAL (B)		

NOTES: [a] Maximum daily production from all reduction cells.
Emission limits are for plant total. After 1 year Fluorides - B to drop to 0.8 lb/TAL.
(TAL means tons aluminum produced).

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ALUMINUM REDUCTION PLANT /197,000 TPY

NAME/ADDRESS: ALUMAX, INC., GOOSE CREEK, SC

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/23/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY SOUTH CAROLINA DEPT. OF HEALTH AND ENVIRONMENTAL CONTROL - REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Anode bake plant		Opacity	≤ 20%		
		Total Fluorides	0.02 lb/ton of Al produced		
Fluoride scrubbers (4)		Opacity	≤ 10%		
		Particulate	5.92 lb/hr (each)		
		SO_2	269 lb/hr (each)		
Roof monitors (8)		Opacity	≤ 10%		
		Particulate	9.07 lb/hr (each)		
		SO_2	2.75 lb/hr (each)		

NOTES: Coke used in anode production shall not exceed 3.0% sulfur by weight.
Pitch used in anode production shall not exceed 0.6% sulfur by weight.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ALUMINUM REDUCTION PLANT /197,000 TPY

NAME/ADDRESS: ALUMAX, INC., GOOSE CREEK, SC

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/23/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY SOUTH CAROLINA DEPT. OF HEALTH AND ENVIRONMENTAL CONTROL - REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff.,%
Potroom groups		Fluoride TSP	0.61 lb/ton of Al produced		
		Gaseous fluoride	0.41 lb/ton of Al produced		

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PRIMARY ALUMINUM REDUCTION PLANT

NAME/ADDRESS: EASTALCO, FREDERICK, MD

DETERMINATION IS: (CONDITIONAL)/(FINAL)/PENDING: DATE OF ISSUE: 2/15/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Pot Line A	90,000 ton/yr				
Pots		TSP	113 lb/day (B)	Dry scrubber	99.9
		SO_2	8,002 lb/day (B)		
Roof monitor		TSP	1,700 lb/day (B)	Wet scrubber	60
		SO_2	1,922 lb/day (B)		25
Anode bake plant	50,000 ton/yr	TSP	74 lb/day (B)	Dry scrubber (fabric)	60
		SO_2	655 lb/day (B)		25
Pot Line B	90,000 ton/yr	TSP	144 (B)	Dry scrubber	99.9

NOTES: Air quality, soil, vegetation analysis

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SOURCE TYPE/SIZE: PRIMARY ALUMINUM REDUCTION PLANT

NAME/ADDRESS: EASTALCO, FREDERICK, MD

DETERMINATION IS: (CONDITIONAL)/(FINAL)/PENDING: DATE OF ISSUE: 2/15/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Potline B (continued)					
Pots		SO_2	8,003 (B)	Fabric Filter	
Roof monitor		TSP	1,700 (B)		60
		SO_2	2,023 (B)		25
Anode bake plant	50,000 ton/yr	TSP	75 (B)	Dry scrubber	67
		SO_2	655 (B)		25
Miscellaneous Points					
Potlines A and B					
Cryolite	61 ton/yr	TSP	48 lb/day (B)	Wet scrubber	85

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PRIMARY ALUMINUM REDUCTION PLANT

NAME/ADDRESS: EASTALCO, FREDERICK, MD

DETERMINATION IS: (CONDITIONAL)/(FINAL)/PENDING: DATE OF ISSUE: 2/15/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Misc. Points (continued)					
Cryolite (continued)		SO_2	25 lb/day (B)		25
Cast House	176,000 ton/yr	TSP	40 lb/day (B)	Fabric filter	99+
Daybins		TSP	96 lb/day (B)	Fabric filter	99+
Other		TSP	314 lb/day (B)	Fabric filter	99+
Potline C	90,000 ton/yr				
Pots		TSP	156 lb/day (B)	Fabric dry scrubber	99.9
		SO_2	8,772 lb/day (B)		
Roof Monitor		TSP	1,200 (B)		

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PRIMARY ALUMINUM REDUCTION PLANT

NAME/ADDRESS: EASTALCO, FREDERICK, MD

DETERMINATION IS: (CONDITIONAL)/(FINAL)/PENDING: DATE OF ISSUE: 2/15/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Potline C (continued)					
Roof monitor (continued)		SO_2	1796 (B)		
Anode bake plant		TSP	75 (B)	Wet scrubber	67
		SO_2	655 (B)		25
Cryolite		TSP	48 (B)	Wet scrubber	85
		SO_2	251 (B)		25
Cast House		TSP	40 (B)	Fabric	99+
Daybin		TSP	48 (B)	Fabric	99+
Other		TSP	314 (B)	Fabric	99+

NOTES:

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ADDITIONAL DETERMINATIONS - METALLURGICAL INDUSTRIES 7.0
(PRIMARY ALUMINUM - 7.1)

NAME - LOCATION	SIZE/FACILITIES (p=potline, a= anode bake)	REGION	BACT/LAER
Anaconda Company Henderson, KY	60,000 ton/yr (p,a)	IV	x
Martin Marietta Company The Dalles, OR	90,000 ton/yr (p)	X	x
Martin Marietta Company Goldendale, WA	114,000 ton/yr (p)	X	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COKE OVEN BATTERIES

NAME/ADDRESS: U.S. STEEL CORPORATION No.13,14,15, CLAIRTON, PA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 11/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Coke Oven Battery x 3	38 ton/hr				
Topside		Opacity	Visible emissions from < 1% of ports		
			Visible emissions from < 4% of off-take pipes		
Quenching				Diverted flow; quenching	
				tower with interior baffles	
Pushing		TSP	.03 lb/ton of coke	Enclosed pushing control system[a]	
				vented to a gas cleaner.	

NOTES: [a] If mobile control is used, a spare system must be installed.
No adverse effects on soils, vegetation or visibility because of affects. Right reserved to require additional drop sleeve seals if post-construction charging performance does not comply with consent decree standards.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COKE OVEN BATTERIES

NAME/ADDRESS: U.S. STEEL CORPORATION NO.13,14,15, CLAIRTON, PA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 11/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Pushing (Continued)		Opacity	< 20% at anytime		
			< 10% during transport of hot coke		
Coke oven gas desul-		S compounds	10 gr/dscf of coke oven gas		
furization					
Doors		Opacity	Visible emissions	Hood control and gas	90 (TSP)
			from <5% of doors	cleaning system	
Charging (Larry car		Opacity	Visible emissions	< 55 s/5 charges	
charging hole ports)					

NOTES: LAER will require SIP revision.
Permit based on start-up and operation with wet coal.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COKE OVEN BATTERIES

NAME/ADDRESS: U.S. STEEL CORPORATION NO.13,14,15 CLAIRTON, PA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 11/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Combustion stack		TSP	.015 gr/dscf [a]	Transmissometer to ensure compliance, if limit is exceeded install best control device. Also evaluate wet ESP control if limit is exceeded.	

NOTES: [a] As measured by the front half of the EPA train.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COKE OVEN BATTERY

NAME/ADDRESS: SEMET-SOLVAY DIVISION, ALLIED CHEMICAL CORPORATION, ASHLAND, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/16/77 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Rail car dump and	(990,000 ton/yr	TSP	Opacity <5%		
associated handling,	limit by permit)		40.9 lb/hr		
conveying, transfer			0.196 lb/ton coal processed		
			restricted to 350 ton/hr		
			coal throughput		
Coal and coke storage	(permit limit	TSP	Opacity <5%		
piles	of 350 ton/hr)		3.05 lb/hr		
			0.207 lb/ton processed		

NOTES:

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SOURCE TYPE/SIZE: COKE OVEN BATTERY

NAME/ADDRESS: SEMET-SOLVAY DIVISION, ALLIED CHEMICAL CORPORATION, ASHLAND, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/16/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Coal crusher/pulverizer (permit limit of	990,000 ton/yr	TSP	Opacity <5%		
and associated handling	and 350 ton/day)		1.8 lb/hr		
equipment			0.0086 lb/ton processed		
Coal mix bins and	"	TSP	Opacity <5%		
associated handling			0.055 lb/ton processed		
equipment					
Coal bins and associated	"	TSP	Opacity <5%, 45.71 lb/hr		
handling			0.219 lb/ton processed		

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COKE OVEN BATTERY

NAME/ADDRESS: SEMET-SOLVAY DIVISION, ALLIED CHEMICAL CORPORATION, ASHLAND, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/16/77 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Charging (wet coal	(limited by permit	TSP	VE: 48 to 55 s/5 consecutive charges.		
only)	to 990,000 ton/		8.48 lb/hr		
	yr and 110 ton/		0.074 lb/ton processed		
	hr daily.				
Topside	(limited by permit	TSP	1.32 lb/hr		
	to 990,000 ton/		0.0117 lb/ton coal processed		
	yr, 113 ton/hr)				

NOTES:

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SOURCE TYPE/SIZE: COKE OVEN BATTERY

NAME/ADDRESS: SEMET-SOLVAY DIVISION, ALLIED CHEMICAL CORPORATION, ASHLAND, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/16/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
(1) Charging ports		TSP	VE: No more than 2% or 2 lids (whichever is greater) of visible emissions during single inspection.		
(2) Standpipe/gooseneck assemblies		TSP	No more than 5% of all assemblies shall exhibit VE		
(3) Stationary jumper pipe pairs		TSP	No more than 5% of total number of pairs shall exhibit VE		
[a] Doors		TSP	No more than 10% of doors shall exhibit VE		
			7.92 lb/hr 0.0701 lb/ton coal processed		

NOTES: [a] Both coke side and pusher side doors are counted (church door is part of pusher side) - 2 doors per oven.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COKE OVEN BATTERY

NAME/ADDRESS: SEMET-SOLVAY DIVISION, ALLIED CHEMICAL CORPORATION, ASHLAND, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/16/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Underfiring	(permit limited	TSP	14.99 lb/hr/stack		
	to 285x10^{6}Btu/hr)		0.133 lb/ton coal processed		
			0.03 gr/dscf		
[a] Pushing	(permit limited	TSP	32.81 lb/hr		
	to 89 ton/hr)		capture 85-90% of TSP generated by pushing.		
			0.015 to 0.30 lb/hr per ton coke pushed		
[b] Quenching	(permit limits to		135.62 lb/hr.		
	350 ton/hr coal throughput)		1.2 lb/ton coal processed		

NOTES: [a] Includes emissions from time coke door removed to car entrance at quench tower.
[b] Limits apply to each quench station.

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SOURCE TYPE/SIZE: COKE OVEN BATTERY

NAME/ADDRESS: SEMET-SOLVAY DIVISION, ALLIED CHEMICAL CORPORATION, ASHLAND, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/16/77 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Quenching (continued)		TSP	No untreated blowdown	to be used for make-up water.	
			Make-up water limited	to 1000 mg/l dissolved solids.	
			Make-up water limited	to 100 mg/l suspended solids.	
Coke screening	(Permit limits		Opacity - 5%		
	to 782,000 ton/yr		16.82 lb/hr		
	coke, 240 ton/hr		0.054 lb/ton coal processed		
	coke)				

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COKE OVEN BATTERY

NAME/ADDRESS: SEMET-SOLVAY DIVISION, ALLIED CHEMICAL CORPORATION, ASHLAND, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/16/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Coke oven gas	(Permit limits to	TSP	0.85 lb/hr		
(excess gas combustion)	2.7×10^{12} Btu/yr		0.00748 lb/ton coal	processed	
	and 311×10^{6}		0.01 gr/dscf		
	Btu/hr)				
Coke oven gas use		SO_2	95 lb/10^{6} cu.ft		

NOTES:

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ADDITIONAL DETERMINATIONS - METALLURGICAL INDUSTRIES 7.0
(METALLURGICAL COKE 7.2)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER
U.S. Steel Corporation Clairton, PA	38 ton/hr/coke oven	III	x
Republic Steel Corporation Warren, OH	1500 ton/day/coke oven	V	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: SILICA FUSION OPERATION 5,000 LB/HOUR

NAME/ADDRESS: MINCO, INC., MIDWAY, TENN Site at Midway

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 7/24/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Electric Arc furnace	1300 lb/hr	TSP	.02 gr/dscf (B)	Fabric filter	99
			3% Opacity		
Crushing, screening,	5000 lb/hr	TSP	.02 gr/dscf (B)	Fabric filter	99
blending and packag-			20% Opacity		
ing					

NOTES: _____

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ADDITIONAL DETERMINATIONS - METALLURGICAL INDUSTRIES 7.0
(FERROALLOY - 7.3)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER
Timken Company Canton, OH	20.5 ton/hr/electric arc furnace	V	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: IRON FOUNDRY 12 TONS/HOUR

NAME/ADDRESS: DAYTON-WALTHER CORPORATION, DAYTON, OHIO Site at Carrollton, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 11/17/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff.,%
Pre-heating furnace	12 tons/hr	TSP	0.69 lb/ton	No control device	
Scrap melters	12 tons/hr	TSP	0.69 lb/ton	Baghouses	98
Sand handling system	36 lb/hr	TSP	0.02 lb/ton sand	Wet impingement scrubber	98
Shot blaster			0.37 lb/ton	Baghouses	98

NOTES: State performed preliminary and final determinations.
EPA permit granted subject to conditions of state permit.
Gas deodorizer associated with core blower shall be operated at all times.

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ADDITIONAL DETERMINATIONS - METALLURGICAL INDUSTRIES 7.0
(FOUNDRIES - 7.4)

NAME - LOCATION	SIZE /FACILITIES	REGION	BACT/LAER
Opelika Foundry Opelika, AL	3.5 ton/hr (cupola)	IV	x

ADDITIONAL DETERMINATIONS - METALLURGICAL INDUSTRIES 7.0
(IRON AND STEEL MILLS 7.5)

NAME - LOCATION	SIZE	REGION	BACT/LAER

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ZINC REFINERY WITH SULFURIC ACID PLANT

NAME/ADDRESS: JERSEY MINIERE ZINC COMPANY, NASHVILLE, TN Site at Clarksville, TN

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 12/13/76 BASIS:* (BACT)[1]/LAER/BACT[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff.,%
Anode cleaning and casting		TSP	0.014 gr/dscf (B)		
Zinc Melting and casting and dust plant		TSP	0.042 and 0.02 gr/dscf (B)		
Dross handlling		TSP	0.015 gr/dscf (B)		
Cadmium melting		TSP	0.000085 gr/dscf (B)		
Lime storage and conveying		TSP	0.015 gr/dscf		
Zinc roaster		SO_2	0.065% Volume		
		TSP	20% Opacity		
Fugitive emissions		TSP	0.015 gr/dscf		

NOTES:

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ADDITIONAL DETERMINATIONS - METALLURGICAL INDUSTRIES 7.0
(PRIMARY SMELTERS 7.6)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: POWDERED STEEL PRODUCTION (SECONDARY METAL PRODUCTION)

NAME/ADDRESS: INTERLAKE, INC., GALLATIN, TN

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/23/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Electric arc furnace	51,750 lb/hr	TSP	12 milligrams/dscm (0.0052 gr/dscf)		
and melt shop opera-		SO_2	5.2 lb/hr (sulfur content of fuel oil shall be limited to 0.25%)		
tions		CO	380.0 lb/hr		
		Opacity	3.% (from electric arc furnace control device)		
		Opacity	0% from melt shop due solely to operating of the furnace except		
			20% (during charging periods)		
			40% (during tapping periods)		

NOTES: Company will use baghouses to control emissions

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: POWDERED STEEL PRODUCTION (SECONDARY METAL PRODUCTION)

NAME/ADDRESS: INTERLAKE, INC., GALLATIN, TN

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/23/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Rotary dryer operations	42,000 lb/hr	TSP	0.008 grains/dscf		
		SO_2	0.84 lb/hr (sulfur content of fuel oil shall be limited to 0.25%)		
Annealing furnaces (3 furnaces-limits per furnace)	4,400 lb/hr (each)	TSP	0.41 lb/hr		
		SO_2	1.16 lb/hr (sulfur content of fuel oil shall be limited to 0.25%)		
Breaking, crushing, screening, sizing, blending, batching and packaging operations.		TSP	0.008 grains/dscf		

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - METALLURGICAL INDUSTRIES 7.0
(SECONDARY METAL - 7.7)

NAME - LOCATION	SIZE /FACILITIES	REGION	BACT/LAER
Denbo Iron and Steel Decatur, AL	Unknown (aluminum furnace)	IV	x
Smelter Service Corporation Columbia, TN	Unknown (aluminum furnace)	IV	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: STRUCTURAL STEEL FABRICATING PLANT

NAME/ADDRESS: ARROW DEVELOPMENT COMPANY, INC., CLEARFIELD, UT

DETERMINATION IS: (CONDITIONAL)/(FINAL)/PENDING: DATE OF ISSUE: 7/15/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VIII
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Abrasive blasting	0.75 ton/hr	PART	1.77 ton/yr (3.53 lb/hr)	Baghouse	99
Spray coating		PART	0.413 ton/yr (0.551 lb/hr)	Mechanical filters	85

NOTES:

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** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: URANIUM MINE AND MILL 950,000 LB/YR (2600 LB/DAY)

NAME/ADDRESS: UNION MINERALS, TUCSON, AZ Site at Gavapai County, AZ

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 11/14/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Multiple hearth Herr		TSP		Scrubber	99+
schoff type furnace					
Boilers (2)	25.4x10^6 Btu	TSP			
(one is standby)	each				
Apron feeder		TSP	0.016 lb/hr	Scrubber	99+
			max. 2 hr avg.		
Uranium concentrate		TSP	0.032 lb/hr	3 scrubbers for scrubb-	99+
area			max. 2 hr avg.	ing and precipitation, drying and packing areas.	

NOTES: Oil consumption limited by permit to 225 bbl/day for furnace and boiler. Sulfur content limited to 1.0%.

Source not subject to air quality impact analysis.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - METALLURGICAL INDUSTRIES 7.0
(OTHER - 7.8)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

8.0 MINERAL PRODUCTS INDUSTRIES

8.1 Asphalt and concrete batch plants
8.2 Coal preparation
8.3 Fiber glass and glass
8.4 Gypsum and lime
8.5 Mineral quarrying and processing
8.6 Portland cement
8.7 Other

BACT/LAER CLEARINGHOUSE REPORT

NEW SOURCE/PSD PERMIT

SOURCE TYPE/SIZE: ASPHALT BATCH PLANT 60,000 TON/YEAR

NAME/ADDRESS: SALT LAKE CITY CORPORATION, SALT LAKE CITY, UT

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 7/20/78 BASIS:* BACT[1] /(LAER)/ BACT[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VIII (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Asphalt batch plant	250 ton/hr	TSP	0.03 gr/scf	Fabric filter [a]	99.9
			Opacity - 20%		
		Fugitive Dust	To be controlled per application which stated		
			"propose to use a rubber tired front loader to		
			charge the feed bins to minimize fugitive dust		
			from the stockpile."		

NOTES: [a] Air to cloth ratio = 4.98/1, 9000 sq ft. cloth; 45,000 ACFM, Nomex bags.
Shutdown of an existing plant satisfies offset policy.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ASPHALT PLANT 210 TON/HOUR (MAX.)

NAME/ADDRESS: WESTERN PAVING, INC. UTAH

DETERMINATION IS: (CONDITIONAL)/FINAL/PENDING: DATE OF ISSUE: 9/28/78 BASIS:* BACT[1] (LAER) BACT[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VIII
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Portable asphalt batch plant	210 TPH (max)	TSP	0.035 gr/dscf (B)	Variable venturii scrubber with pressure drop of 18-23 inches w.g. Inlet volume = 28,000 ACFM at 350° F	99.7

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - MINERAL PRODUCTS INDUSTRIES 8.0
ASPHALT AND CONCRETE BATCH PLANTS 8.1

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER
Craig Blacktop and Paving Hagerstown, MD	75,000 ton/yr	III	x
Carl Peters, Inc. Hollywood, AL	100 ton/hr	IV	x
Thompson Construction Company Jackson, TN	120 ton/hr	IV	x
Southland Paving Company Auburn, AL	150 ton/hr	IV	x
Sherrill Paving Company Winston-Salem, NC	150 ton/hr	IV	x
Ken-Tenn Construction Company Martin, TN	150 ton/hr	IV	x
Western Paving, Inc. UTAH	210 ton/hr	VIII	x
Oscar Miller Raleigh, NC	320 ton/hr	IV	x
Newton County Stone Sheperdsville, KY	450 ton/hr	IV	x
D. R. Allen and Son LaGrange, GA	Unknown	IV	x
H. R. Imbt, Inc. Stroudsburg, PA	300 ton/hr	III	x
Nifty Paving Company Colburn, VA	90 ton/hr	III	x
Burrell Construction and Supply Tarentum, PA	96 ton/hr	III	x
Highway Materials, Inc King of Prussia, PA	<50,000 ton/yr	III	x
Tennessee Blacktop, Inc. Brentwood, TN	350 ton/hr	IV	x
Kentucky Stone Company Marion, KY	163 ton/hr	IV	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COAL PREPARATION PLANT 1.92×10^6 TON/YR

NAME/ADDRESS: BADGER COAL COMPANY, GRAND BADGER NO.1, SAGO, W.VA.

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 1/5/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR NEW/MODIFIED SOURCE

BY EPA REGION III
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Thermal dryer	2.2×10^6 ton/yr	TSP	27.8 lb/hr and 0.031	Cyclones	95
			gr/dscf (N)	Venturii and mist	99.8
				eliminator	
		SO_2	88.8 lb/hr (B)	Venturii	50

NOTES: Required stack height of 188.9 ft above grade.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COAL CLEANING PLANT 1000 TONS/HR

NAME/ADDRESS: R & F COAL COMPANY, BELMONT COUNTY, OH

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 3/31/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION V
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Truck dump	1000 lb/hr	TSP	3.5 ton/yr (B)	Capture and fabric filter	80
Rotary breaker	1000 lb/hr	TSP	2.5 ton/yr (B)	Fabric filter	99
Raw coal transfer belts	1000 lb/hr	TSP	17.5 ton/yr (B)	Capture plus fabric filter	80
Raw coal storage pile	1000 lb/hr	TSP	24.1 ton/yr (B)	Dedusting agent	90
Raw coal sampling bldg	1000 lb/hr	TSP	0.9 ton/yr (B)	Dust collector	99
Preparation plant duct belt	1000 lb/hr	TSP	0.9 ton/yr (B)	Dust collector	99

NOTES: No air quality analysis required

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COAL CLEANING PLANT 100 TON/HOUR

NAME/ADDRESS: BLACKSTONE COAL COMPANY, FT. PAYNE, AL

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 11/17/77 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Truck dump	100 ton/hr	TSP	.05 lb/ton (B=N)	Enclosed wet suppression	90
Screens and transfer points		TSP	.07 lb/ton (B=N)	Enclosed wet suppression	90
Crusher		TSP	.02 lb/ton (B=N)	Enclosed wet suppression	90
Surge bins		TSP			90
Stock piles		TSP	.03 lb/ton (B=N)	Enclosed wet suppression	90
Wet washing		TSP		None needed	
Loading		TSP	.05 lb/ton (B=N)	Wet suppression	90

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COAL PREPARATION PLANT 1.12×10^6 LB/HR

NAME/ADDRESS: WESTMORELAND COAL COMPANY, BOOLES, WV

DETERMINATION IS: CONDITIONAL/FINAL/(PENDING:) DATE OF ISSUE: _____ BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Coal dryer (2)	560,000 lb/hr	TSP	.025 gr/dscf (B)	Cyclone and Venturii	99.8
	each	SO_2	34 lb/hr (B)		40

NOTES: From 12 to 8 am second drier must not operate above 50% design capacity; also 19.6 lb/hr limit on TSP for each drier. Stack tests within 60 days of commencement. All modelling done.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COAL PREPARATION PLANT

NAME/ADDRESS: ISLAND CREEK COAL COMPANY, UPSHUR PLANT, TALLMANVILLE, WV

DETERMINATION IS: CONDITIONAL/FINAL/(PENDING: DATE OF ISSUE: _____ BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Thermal dryer	321 ton/hr	TSP	30.5 lb/hr and (B)	Mechanical cyclones	99.76
	feed rate		0.031 gr/dscf	followed by Venturii	
	(130×10^6 Btu/hr			scrubber	
	stoker fired	SO_2	60.0 lb/hr (B)		70.3
	dryer) using				
	1% S; 8.5% A				
	HV=12,900				
	Btu/lb				

NOTES: Equipment and emission rates determined to be BACT. Entire operation shall be operated and maintained to minimum fugitive dust. Maintain records and conduct stack emission tests to determine compliance. Stack will be 180 feet.

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ADDITIONAL DETERMINATIONS - MINERAL PRODUCTS INDUSTRIES 8.0
(COAL PREPARATION - 8.2)

NAME - LOCATION	SIZE (c=crusher, d=dryer, m=materials handling)	REGION	BACT/LAER
Adams Construction Company Allen, KY	150,000 ton/yr (c,m)	IV	x
Texas Industries Thurber, TX	200,000 ton/yr (m)	VI	x
Cargill-Johnson Coal Company Manchester, KY	300,000 ton/yr (c,m)	IV	x
Blackstone Coal Company Ft. Payne, AL	100 ton/hr (c,m)	IV	x
Island Creek Coal Company Providence, KY	100 ton/hr (c) 400 ton/hr (m)	IV	x
Island Creek Coal Company Fies, KY	100 ton/hr (c,m)	IV	x
Island Creek Coal Company Turkey Creek, KY	600,000 ton/yr (d,m)	IV	x
Intercontinental Coal AL	800,000 ton/yr (c,m)	IV	x
Tesoro Coal Company Hazard, KY	1,000,000 ton/yr (c,m)	IV	x
Greenwood Land and Mining Company Greenwood, KY	1,000,000 ton/yr (c,m)	IV	x
Powermaker, Inc. Dunlap, TN	200 lb/hr (d,c,m)	IV	x
Consumer Coal Company Perry County, KY	300 ton/hr (c) 300 (m)	IV	x
Anschutz Coal Corporation Carbondale, CO	300 ton/hr (c,m)	VIII	x
Island Creek Coal Company Talmanville, WV	321 ton/hr (d)	III	x
Utah Power and LIght Emery County, UT	2.3×10^6 ton/yr (c,m)	VIII	x
Baily Mining Company Bypro, KY	450 ton/hr (c,m)	IV	x
George Arrington Company Boyd County, KY	500 ton/hr (c,m)	IV	x

Continued

ADDITIONAL DETERMINATIONS - MINERAL PRODUCTS INDUSTRIES 8.0
(COAL PREPARATION - 8.2)

NAME - LOCATION	SIZE (c=crusher, d=dryer, m=materials handling)	REGION	BACT/LAER
Richard M. Johnson Boyd County, KY	500 ton/hr (c)	IV	x
Lake Coal Company Letcher County, KY	500 ton/hr (c,m)	IV	x
Bledsoe Coal Company Helton, KY	500 ton/hr (c,m)	IV	x
T. C. Bell, Inc. Cannon, KT	500 ton/hr (c,m)	IV	x
Bell County Coal Corporation Middlesboro, KY	500 ton/hr (c,m)	IV	x
Branham and Baker Prestonburg, KY	800 ton/hr (c) 800 ton/hr (m)	IV	x
Peabody Coal Company Morganfield, KY	1875 ton/hr (c,m)	IV	x
Mid-Continent Coal and Coke Ridetone, CO	Size unknown (d)	VIII	x
Pontiki Coal Lovely, KY	Unknown (d,m)	IV	x
Island Creek Coal Company Bob White, WV	0.5×10^6 ton/year (d)	III	x
Mettiki Coal Corporation Garret County, MD	700 ton/hr (d)	III	x
Landmark Mining Company Pikesville, KY	418 ton/hr (c,m)	IV	x
U.S. Steel Corporation Hueytown, AL	3×10^6 ton/year (d)	IV	x
Blue Grass Mining Greenup, KY	200 ton/hr (c,m)	IV	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: FIBER GLASS PLANT

NAME/ADDRESS: JOHNS-MANVILLE SALES CORPORATION, DENVER, CO Site at Willows, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/3/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Line 132 (modified)					
Collection		TSP	4.22 lb/hr (per unit) (B)		
Cooling		TSP	0.48 lb/hr (per unit) (B)		
Curing		TSP	7.00 lb/hr (per unit) (B)		
Wool blowing		TSP	0.20 lb/hr (per unit) (B)		

NOTES:

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** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: FIBER GLASS PLANT

NAME/ADDRESS: JOHNS-MANVILLE SALES CORPORATION, DENVER, CO Site at Willows, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/3/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Line 133 (new)					
Silos		TSP	0.40 lb/hr (per unit) (B)		
Melter		TSP	1.25 lb/hr (B)		
Collection		TSP	5.20 lb/hr (per unit) (B)		
Curing		TSP	8.00 lb/hr (B)		
Cooling		TSP	0.76 lb/hr (B)		
Mixing		TSP	0.20 lb/hr (per unit) (B)		
Cullet		TSP	0.01 lb/hr (B)		

NOTES: Herm process defined as BACT for new line 133

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - MINERAL PRODUCTS INDUSTRIES 8.0
(FIBER GLASS AND GLASS 8.3)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: LIME PLANT 22.5 TON/HR OF LIME

NAME/ADDRESS: GREER LIME COMPANY, PO BOX FF, SALTVILLE, VA 23470

DETERMINATION IS: (CONDITIONAL)/FINAL/PENDING: DATE OF ISSUE: 6/28/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Lime kiln	33.5 ton/hr	TSP	2.1 lb/hr (B)	Baghouse	99.7
Lime hydrater	3.8 ton/hr	TSP	0.75 lb/hr (B)	Scrubber	85
Crushing and screening	15 ton/hr	TSP	0.49 lb/hr (B)	Baghouse	99.5
Lime kiln	15 ton/hr	SO_2	9.2 lb/hr (B)	<.7% S in fuel	

NOTES: Stack emission tests to be conducted by company. No modelling as emissions were considered small.

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** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: LIME MANUFACTURING PLANT (LUTTRELL, TN) 33.5 TON/HR OF LIME

NAME/ADDRESS: LUTTRELL LIME COMPANY, KNOXVILLE, TN

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 8/21/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Coal handling	130,466 lb/hr	TSP	0.075 lb/hr (B)	Water spray and baghouse	99.9
Limestone feed and	67,000 lb/hr	SO_2	500 ppm (B)		
kiln		TSP	19.5 lb/hr and		
			Opacity 10% (B)		
Lime hydrator	46,000 lb/hr	TSP	2.1 lb/hr (B)	Baghouse #436	99.9
			.06 lb/hr (B)	Baghouse #509	99.9
			.03 lb/hr (B)	Baghouse #514	99.9
				Scrubber #408	99.9

NOTES: Trucks and railroad cars to be enclosed

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: LIME MANUFACTURING PLANT (LUTTRELL, TN) 33.5 TON/HR OF LIME

NAME/ADDRESS: LUTTRELL LIME COMPANY, KNOXVILLE, TN

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 8/21/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Lime hydrater (continued)				Baghouse #437	99.9
Product handling	67,000 lb/hr	TSP	1.3 lb/hr (B)	Baghouse #1	99.9
system			1.7 lb/hr (B)	Baghouse #2	99.9
Product storage		TSP	2.7 lb/hr (B)	Baghouse #3	99.9
system			.23 lb/hr (B)	Baghouse #4	99.9
Product loading	280,000 lb/hr	TSP	.21 lb/hr (B)	Baghouse #5	99.9
system					

NOTES: _____

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: GYPSUM WALLBOARD MANUFACTURING 20,000 LB/HR OF GYPSUM WALLBOARD

NAME/ADDRESS: FLINTKOTE COMPANY, FLORENCE CO

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 10/27/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR NEW/MODIFIED SOURCE

BY EPA REGION VIII
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Calciner/mill	10 ton/hr	TSP	0.01 gr/acf (B)	Cyclone and	95
	gypsum			baghouse (A/C=5.2)	99.5
End trim saw		TSP	0.08 gr/acf (B)	Baghouse	99.5
Dryer		SO_2		Propane fuel-oil stand-	
				by limited to 0.7%	
				sulfur	

NOTES:

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ADDITIONAL DETERMINATIONS - MINERAL PRODUCTS INDUSTRIES 8.0
(GYPSUM AND LIME - 8.4)

NAME - LOCATION	SIZE/FACILITIES k=kiln, h=hydrator, m=materials handling	REGION	BACT/LAER
Allied Products Montevallo, AL	500 ton/hr (k)	IV	x
Martin Marietta Calera, AL	800 ton/day (k)	IV	x
Ash Grove Cement Company Portland, OR	340 ton/day (k)	X	x
Can-Am Corporation Douglas AZ	400 ton/day (k)	IX	x
Black River Mining Company Carntown, KY	300 ton/day (k,m)	IV	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PHOSPHATE MINE — 4665×10^6 LB DRY ROCK/YEAR

NAME/ADDRESS: BORDEN CHEMICAL — Site at Fort Lonesome, FL

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 12/14/76 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Fluidized Bed	109×10^6 Btu/hr	TSP	.069 gr/dscf (B)	Venturi scrubber	99+
rocl. dryer		SO_2	(B)	Low sulfur oil (0.8%)	
Materials storage	5224×10^6 lb/yr	TSP	.069 gr/dscf	Wet scrubber	99
and handling					

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: STONE CRUSHING 200 TON/HOUR CRUSHED STONE

NAME/ADDRESS: FLINTKOTE COMPANY, CAMPBELL GROVE DIVISION, MEDFORD QUARRY, CARROLL COUNTY, MD

DETERMINATION IS: CONDITIONAL/FINAL/(PENDING:) DATE OF ISSUE: _____ BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION III _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Stone crusher	200 ton/hour	TSP	.02 gr/acfd (S)	Water spray and bag-	99.99
				house	
				Eastern Control System	
Primary Crusher	132 ton/hour	TSP	2 ton/year	Model #144-C10	
				13,000 ACFM	
Secondary crusher	50 ton/hour	TSP	1 ton/year	inlet 5 gr/acfd	
(1 screen)				out .02 gr/acfd	
Tertiary crusher (1 screen)	50 ton/hr	TSP	1 ton/year		

NOTES: _____

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ADDITIONAL DETERMINATIONS - MINERAL PRODUCTS INDUSTRIES 8.0
(MINERAL QUARRYING AND PROCESSING 8.5)

NAME - LOCATION	SIZE/ m=mining, c=crushing, mh= materials handling	REGION	BACT/LAE
Tennessee Electro Minerals Greenville, TN	5 ton/hr (c)	IV	x
Scat, Inc. Pinewood, SC	Unknown (c,mh)	IV	x
Pathfinder Mines Corporation Shirley Basin, WY	20 ton/yr (m)	VIII	x
Empire Energy Corp.	$3x10^6$ ton/yr (m)	VIII	x
Kerr-McGee Nuclear Corporation Converse County, WY	Unknown (m)	VIII	x
Arundel Corporation Towson, MD	400 ton/hr (c,mh)	III	x
Houston Oil and Minerals Corp. Manhattan, NV	Unknown (c,mh)	IX	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: CEMENT PLANT 1.5x10^6 TON/YEAR

NAME/ADDRESS: IDEAL BASIC INDUSTRIES, THEODORE, AL

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 3/30/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Coal dryer	200 ton/hr	Particulate	21.1 lb/hr or		
			0.031 gr/dscf (N)	whichever is more stringent	
		Opacity	< 20%		
		SO_2	60 lbs/ton of coal or		
			180 lbs/hr	whichever is more stringent	
Coal processing conveying		Opacity	< 10%		
Storage and Loading		Particulate	0.01 gr/dscf		
systems					

NOTES: Alternative #1 - Kilns and coolers exhausting through the raw mill.
Alternative #2 - Coolers exhausting separately

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

SOURCE TYPE/SIZE: CEMENT PLANT 1.5x10^6 TON/YEAR

NAME/ADDRESS: IDEAL BASIC INDUSTRIES, THEODORE, AL

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 3/30/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Stockpiles		Fugitive Dust	Apply water or suitable chemicals		
Paved surfaces			Clean as necessary		
Loading/unloading			Utilize adequate controls		
			Any spillage cleanup is to be done with a vacuum system		
			Removal of waste materials should minimize fugitive dust.		
			Pave all utilized auto or truck traffic roads		

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: CEMENT PLANT 1.5x10^6 TON/YEAR

NAME/ADDRESS: IDEAL BASIC INDUSTRIES, THEODORE, AL

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 3/30/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Raw mills, Kilns	Kiln 19,200 lb/hr	Particulate	93 lb/hr or 0.30 (N)		
(and clinker cooler	Mill 12,000 lb/hr		lb/ton of fuel (dry basis)		
if alternative No.1			to kiln	whichever is more stringent	
is utilized)		Opacity	< 20%		
and clay dryer		SO_2	60 lbs/ton of coal		
			burned or 2,160 lb/hr	whichever is more stringent	

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: CEMENT PLANT 1.5x10^6 TON/YEAR

NAME/ADDRESS: IDEAL BASIC INDUSTRIES, THEODORE, AL

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 3/30/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IV
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Clinker Cooler (if		Particulate	31 lb/hr or 0.10 lb/ton of feed (dry basis) to kiln		
alternative No.2 is				whichever is more stringent	
utilized		Opacity	< 10% (N)		
Clay dryer	12,000 lb/hr	Particulate	4.30 lb/hr or 0.01 gr/dscf whichever is more stringent		
		Opacity	< 10% (N)		
Fabric filters		Fugitive dust	Fabric filters used to control fugitive dust on all other emission points not mentioned in the previous conditions, ~~shall meet a particulate emission limit of 0.01 gr/dscf~~		
		Opacity	< 10%		

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PERMANENTE CEMENT PLANT 1.6x10^6 TON/YEAR

NAME/ADDRESS: KAISER CEMENT AND GYPSUM CORPORATION, OAKLAND, CA Site at Santa Clara County, CA

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 12/26/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR NEW/MODIFIED SOURCE

BY EPA REGION IX (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S)[a] AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Kiln mill system #1		TSP	18 lb/hr or 0.02 gr/dscf	Baghouse	
		NO_x	1158 lb/hr. This is total for kiln mill systems, precalciner coal and kiln coal systems		
Kiln mill system #2		TSP	18 lb/hr or 0.02 gr/dscf	Baghouse	
		SO_2	481 lb/hr. This is total for kiln mill, precalciner		
			coal and kiln coal systems		
Clinker cooler		TSP	5.3 lb/hr or 0.02 gr/dscf	Baghouse	
Precalciner coal system		TSP	3.5 lb/hr or 0.02 gr/dscf	Baghouse	
Kiln coal system		TSP	3.5 lb/hr or 0.02 gr/dscf	Baghouse	

NOTES: [a] Limits are all maximum 2 hour averages.
Coal use limited to 771/644 ton/day (daily/annual averages), sulfur content limited to 2% for average load or 1% annual average. Source shall shut down existing wet process facilities as dry process facilities become operable. Fugitive emissions shall be controlled by wet suppression or stabilization systems.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: CEMENT PLANT 550,000 TON/YEAR

NAME/ADDRESS: OREGON PORTLAND CEMENT, HUNTINGTON, OR

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 7/27/77 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION X (Agency) KEN BROOKS (Person) (206) 442-1106 (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Kiln	2640 ton/day	TSP	0.325 gr/scf/ (B)	ESP(3)	99.85
			435.92 lb/day		
		SO_2	10 ppm (B)	"Suspension preheater	98
				raw mill system"	
Raw storage	2750 ton/day	TSP	0.0185 gr/scf/ (B)	Jet pulse baghouse	99.9
			2.76 lb/day		
Raw mill	2641 ton/day	TSP	0.0185 gr/scf/ (B)	Jet pulse baghouse	99.9
			15.41 lb/day		

NOTES: Emission limits are for each individual baghouse or ESP.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: CEMENT PLANT 550,000 TON/YEAR

NAME/ADDRESS: OREGON PORTLAND CEMENT, HUNTINGTON, OR

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 7/27/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION X (Agency) KEN BROOKS (Person) (206) 442-1106 (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Blending	2641 ton/day	TSP	0.0185 gr/scf/ (B)	Jet pulse baghouse	99.9
			44.99 lb/day		
Storage	2641 tons/day	TSP	0.0185 gr/scf/ (B)	Jet pulse baghouse	99.9
			45.21 lb/day		
Clinker	1656 ton/day	TSP	0.0185 gr/scf/ (B)	Jet pulse baghouse(2)	99.9
			3.87 lb/day		
Finish mill	1653 ton/day	TSP	0.0165 gr/scf/ (B)	ESP	99.98
			39.92 lb/day		

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: CEMENT PLANT 550,000 TON/YEAR

NAME/ADDRESS: OREGON PORTLAND CEMENT, HUNTINGTON, OR

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 7/27/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION X (Agency) KEN BROOKS (Person) (206) 442-1106 (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Clinker/separator	1653 ton/day	TSP	0.0185 gr/scf/ (B)	Jet pulse baghouse	99.9
			20.55 lb/day		
Crusher	345 ton/day	TSP	0.0185 gr/scf/ (B)	Jet pulse baghouse (2)	99.9
			0.95 lb/day		
Coal transporter	256 ton/day	TSP	0.0185 gr/scf/ (B)	Jet pulse baghouse (2)	99.9
			0.79 lb/day		
Cement storage	1729 ton/day	TSP	0.0185 gr/scf/ (B)	Jet pulse baghouse (3)	99.9
			3.36 lb/day		

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: CEMENT PLANT 550,000 TON/YEAR

NAME/ADDRESS: OREGON PORTLAND CEMENT, HUNTINGTON, OR

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 7/27/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION X (Agency) KEN BROOKS (Person) (206) 442-1106 (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Cement truck loading	2000 ton/day	TSP	0.0185 gr/scf/ (B)	Jet pulse baghouse (2)	99.8
			2.67 lb/day		

NOTES:

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ADDITIONAL DETERMINATIONS - MINERAL PRODUCTS INDUSTRIES 8.0
(PORTLAND CEMENT - 8.6)

NAME - LOCATION	SIZE/FACILITIES: k=kiln, m=mills c=clinker cooler, r=crusher	REGION	BACT/LAER
Lone Starr LaFarge, Inc. Chesapeake, WV	30,000 ton/yr (k,c)	III	x
Marquette Cement Company Cape Girardeau, MO	1,155,000 ton/yr (k)	VII	x
Ideal Basic Industries LaPorte, CO	(k,c)	VIII	x
Coplay Cement Manufacturing Co. Nazareth, PA	3100 ton/day (k,c,m)	III	x
General Portland, Inc. Dallas, TX	2750 ton/day (k)	VI	x
Capitol Aggregates, Inc. San Antonio, TX	1370 ton/day (k,c,m)	VI	x
Flintkote Company Redding, CA	Unknown (k)	IX	x
California Portland Cement Co. Davenport, CA	$2x10^6$ ton/yr (k,c)	IX	x
Lone Star Industries, Inc. Davenport, CA	59 ton/hr (k,c,m)	IX	x

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ASPHALT ROOFING PLANT

NAME/ADDRESS: GAF CORPORATION, WAYNE, NJ Site at Fontana, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/3/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff.,%
Limestone storage silo		TSP	0.13 lb/hr	Bag collector	
Talc storage silo		TSP	0.13 lb/hr	Bag collector	
Sand storage silo		TSP	0.08 lb/hr	Bag collector	
Talc use bin		TSP	0.02 lb/hr	Bag collector	
Sand use bin		TSP	0.02 lb/hr	Bag collector	
Limestone use bin		TSP	0.06 lb/hr	Bag collector	

NOTES: Fuel usage limited to 325 gal/day. Sulfur content shall not exceed 0.5%

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: ASPHALT ROOFING PLANT

NAME/ADDRESS: GAF CORPORATION, WAYNE, NJ Site at Fontana, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/3/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff.,%
Roofing machine:					
Surfacing and winding sections		TSP	3.43 lb/hr	Bag collector	
Unwind and festoon sections		TSP	1.72 lb/hr	Bag collector	
Hot asphalt storage tanks		TSP	0.17 lb/hr	ESP	
No.1 Blow still fume control		TSP	0.16 lb/hr	HEAF Unit	
No.2 Blow still fume control		TSP	0.16 lb/hr	HEAF Unit	
Timberline process		TSP	0.04 lb/hr	ESP	
Asphalt fume control		TSP	3.0	ESP	

NOTES:

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: MINERAL WOOD INSULATION MANUFACTURING FACILITY 7.0 TON/HOUR MINERAL WOOL

NAME/ADDRESS: ABC MANUFACTURING COMPANY, CASA GRANDA, AZ

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 2/1/79 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION	
				Equipment type, etc.	Eff.,%
Cupola furnace	13,700 lb/hr	TSP	2 lb/hr	Fabric filter	
	(Charge rate)	CO	55.6 lb/or 2,000		
			ppm		
Blow chamber		TSP	10.8 lb/hr		

NOTES: Operation of cupola furnace restricted to 300 days/year. Facility is not a major source as long as permit conditions are met. Natural gas consumption in blow chamber afterburner shall not exceed 76.6 ft^3 per minute.

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ADDITIONAL DETERMINATIONS - MINERAL PRODUCTS INDUSTRIES 8.0
(OTHER - 8.7)

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER

9.0 PETROLEUM INDUSTRY

9.1 Petroleum refining

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: OIL FIELD

NAME/ADDRESS: TEXFEL PETROLEUM CORPORATION, LOS ANGELES, CA Site at Kern County, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 6/23/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Steam generator (for steam response well use)	50×10^6 Btu/hr	SO_2	0.094 lb/10^6 Btu (B)	Scrubber (Fuel limited to 190 bbl/day of oil with less than 1.13% sulfur)	96
Oil wells (9)		HC	1.9 lb/day per well (B)	HC vapor recovery system on 17 existing and 9 new wells	85

NOTES: Permit states this is not a major source and is exempt from air quality impact analysis. PSD requirements are satisfied if conditions of permit are met.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROLEUM REFINERY 10,000 bbl/day

NAME/ADDRESS: PLACID REFINING COMPANY, DALLAS, TX Site at Nacitoches Parish, LA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/23/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Heater		SO_2	15.7 lb/hr (B)	SO_2 control - use of low	
		HC	0.9 ton/yr (B)	sulfur fuel from topping	
Boiler		SO_2	12.5 lb/hr (B)	facility (< 0.45%)	
		HC	0.7 ton/yr (B)		
Flare		SO_2	0.04 lb/hr (B)	HC control - floating	
		HC	0.035 ton/yr (B)	roof tanks, smokeless	
Storage tanks		HC	45.9 ton/yr)B)	flare, covered oil/water	
				separation equip., mechanical	

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROLEUM REFINERY 10,000 bbl/day

NAME/ADDRESS: PLACID REFINING COMPANY, DALLAS, TX Site at Nacitoches Parish, LA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/23/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VI
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Truck loading		HC	5.5 ton/yr (B)	pump seals, use of air	
				cooling, line flushing	
Miscellaneous		HC	26 ton/yr (B)		

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROLEUM REFINERY

NAME/ADDRESS: BEACON OIL COMPANY, HANFORD, CA Site at Hanford, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 9/19/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Crude unit	5,000 bbl/day	SO_2	27.3 ton/yr	Total heat input of new fired	
Naptha hydro-desulfur-	5,000 bbl/day	NO_2	74.5 ton/yr	equipment restricted to	
ization unit		TSP	4.87 ton/yr	79.6×10^6 Btu/hr	
Naptha reformer	2,000 bbl/day	CO	6.14 ton/yr		
		HC	7.69 ton/yr		
Sulfur removal system	1.69×10^6 SCFD	SO_2	22.6 ton/yr; 5.16 lb/	Plant efficiency with 94%+ caustic	
			hr (2 hr avg.)	scrubber with efficiency of 58%	

NOTES: All figures are emission limits for 1985 operation (figures for 1980 also given in permit). Source exempted from increment and BACT analysis for SO_2 due to allowable emissions of less than 50 tons/year. (See addendum for emission reduction list and additional requirements)

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: PETROLEUM REFINERY

NAME/ADDRESS: BEACON OIL COMPANY, HANFORD, CA Site at Hanford, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 9/19/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Sour water stripper	140 bbl/day				
Barrel tanks (2)	10,000 bbl. ea.	HC	0 (L)	Vapor recovery system	100
Barrel tank	20,000 bbl.	HC	0 (L)	Vapor recovery system	100
Cooling tower	600 gal/min.	HC	5.18 lb/day		

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL REQUIREMENTS:

Beacon shall install a floating cover on the existing gunnited holding pond. Beacon shall limit the flow of process waste water to 49.6 gal/min (annual average) and 54.5 gal/min. (24 hr avg). Beacon shall retain and maintain in operation the existing vapor recovery system on all product loading facilities of gasoline stocks or finished gasoline. Beacon shall not flare on a continuous or regular basis any process gases produced in any of the new equipment. Additional requirements on fuel usage and sulfur content.

EMISSION REDUCTIONS OF HC

Measure	Reductions (Tons/year)
Less fuel oil	1.2
Tanks-vapor recovery	516.9
Waste water measures	57.3
Less cooling water	0.3
Pump controls	48.9
Potential emissions	624.6
Net emission	283.6
Reductions	341.0

ALLOWABLE EMISSIONS FOR 1985 OPERATION FROM NEW EQUIPMENT

Pollutant	1985 Limit (tons/year)
SO_2	49.9
NO_2	74.5
TSP	4.87
CO	6.14
HC	44.9

ADDITIONAL DETERMINATIONS - PETROLEUM INDUSTRY 9.0
(PETROLEUM REFINING - 9.1)

NAME - LOCATION	SIZE/FACILITIES b=boiler, heater t=tank	REGION	BACT/LAER
Ashland Petroleum Company Ashland, KY	Unknown (b, catalyst regenerator)	IV	x
Ashland Petroleum Company Catlettsburg, KY	Unknown (b, catalyst regenerator, reformer)	IV	x
Hydrocarbon Development Corp. Natchez, MS	15,000 bbl/day (b,t)	IV	x
Gulf Oil Corporation Belle Chasse, LA	89,000 bbl/day (b, catalyst regenerator)	VI	x
Sinclair Oil Corporation Sinclair, WY	Unknown (b)	VIII	x
Lake Charles Refining Company Lusk, WY	10,000 bbl/day (b,t)	VIII	x
Manatee Energy Company Miami, FL	15,000 bbl/day (b,t)	IV	x
Tosco Corporation Martinez, CA	20,000 bbl/day (reformer)	IX	x
Cascade Energy, Inc. Rainier, OR	Unknown (b)	X	x
Exxon Company Kern County, CA	25×10^6 Btu/hr (b)	IX	x
Shell Oil Company Kern County, CA	50×10^6 Btu/hr (b)	IX	x
Ashland Petroleum Company Ashland, KY	86×10^6 Btu/hr (b, hydrogen fluoride alkylation unit, fugitive HC)	IV	x
Semarck California, Inc. Kern County, CA	20,000 bbl/day (b, storage tanks, Claus plant)	IX	x
VIRCO St. Croix, U.S. VI	Unknown (b,t)	II	x
Exxon Bayway, NJ	30,000 bbl/day (fugitive VOC)	II	x

10.0 WOOD PROCESSING

10.1 Chemical wood processing (pulp mills)

10.2 Other

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: KRAFT PULP MILL PULPING CAPACITY 1034 TONS/DAY

NAME/ADDRESS: BOISE CASCADE, P.O. BOX 500, WALLULA, WA 99363

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 2/24/78 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR NEW/MODIFIED SOURCE

BY EPA REGION X (Agency) LARRY SIMS AND PAUL BOYS (Person) (206) 442-1106 (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Recovery boiler (No.2)	238 ADT/day	TSP	0.44 gr/scf/476 (N)	ESP	99.5
	feed or 738,000[a]		lb/day		
		SO_2	160 ppm/5424 lb/day (B)	Impinger type wet	95
				scrubber	
		Opacity	35% (N)		
Lime kiln	544 tons/day	TSP (gas)	0.067 gr/scf/466 (B)	Venturi scrubber	
			lb/day		
	or 847 ADT				

NOTES: [a] Pounds black liquor dry solids/day; ADT means Air Dried Tons.
Where no NSP requirement, state standards apply for opacity - 20%

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

SOURCE TYPE/SIZE: KRAFT PULP MILL PULPING CAPACITY 1034 TONS/DAY

NAME/ADDRESS: BOISE CASCADE, P.O. BOX 500, WALLULA, WA 99363

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 2/24/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR NEW/MODIFIED SOURCE

BY EPA REGION X (Agency) LARRY SIMS AND PAUL BOYS (Person) (206) 442-1106 (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Lime kiln (continued)		TSP (oil)	0.12 gr/scf/906 (B)		
			lb/day		
		Opacity	20% (S)		
		SO_2	5 ppm/19 lb/day (B)		
No.2 Dissolver vent	253 ADT	TSP	71 lb/day (N)	Chemico-type scrubber	
		Opacity	20% (S)		
Decker hood	200 ADT	TSP	0.01 ADT/2 lb/day (B)		
		Opacity	20% (S)		

NOTES:

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** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: KRAFT PULP MILL PULPING CAPACITY 1034 TONS/DAY

NAME/ADDRESS: BOISE CASCADE, P.O. BOX 500, WALLULA, WA 99363

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: FOR NEW/MODIFIED SOURCE DATE OF ISSUE: 2/24/78 BASIS:* BACT[1] /LAER/(BACT[2])

BY EPA REGION X (Agency) LARRY SIMS AND PAUL BOYS (Person) (206) 442-1106 (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Hogfuel boiler	200,000 lb/hr	TSP	0.04 gr/scf/459 (B)	I.D. Zurn Air System,	
	steam		lb/day	type MTSA, two parallel	
		Opacity	20% (S)	impinger type scrubbers	
Power boiler	200,000 lb/hr	TSP	299 lb/day (B)		
gas-oil (major)	steam	SO_2	3025 lb/day (B)		
		Opacity	20% (S)		

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - WOOD PROCESSING 10.0
(CHEMICAL WOOD PULPING - 10.1)

NAME - LOCATION	SIZE/FACILITIES (b=boiler st=smelt tank, l=lime kiln, f=black liquor furnace)	REGION	BACT/LAER
Boise Southern Company Deridder, LA	535 ton/day (newsprint machine	VI	x
Leaf River Forest Products New Augusta, MS	550 ton/day (b,st,l,f)	IV	x
Continental Forest Industries Port Wentworth, GA	800 ton/day (f,l,st)	IV	x
International Paper Company Gardinir, OR	1033 ton/day (l,b,st)	X	x
Boise Cascade St. Helens, OR	1150 ton/day (l)	X	x
Union Camp Corporation Autauga, AL	1223 ton/day (b,st,l)	IV	x
Federal Paperboard Reigelwood, NC	Unknown (b,f)	IV	x
Parsons and Whittemore Clairborne, AL	Unknown (b,f,l)	IV	x
Alabama River Pulp Company Clairborne, AL	Unknown (b,f,l)	IV	x
Union Camp Corporation Montgomery, AL	Unknown (st,b,f)	IV	x
Container Corporation of America Fernidina Beach, FL	Unknown (b,st)	IV	x
Tennessee River Pulp and Paper Mill Counce, TN	Unknown (f,b,st)	IV	x
Proctor and Gamble Georgia	1400 ton/day (b,l,st)	IV	x
Hoerner Waldorf Corporation Missoula, Montana	Unknown (b,l,st)	VIII	x
Carolina Kraft Corporation Bennettsville, SC	Unknown (f,l,st)	IV	x
Continental Forest Industries Hopewell, VA	Unknown (b,f,st)	III	x
Georgia-Pacific Corporation Halifax, NC	700 ton/day (f,l,st)	IV	X

ADDITIONAL DETERMINATIONS - WOOD PROCESSING 10.0
(OTHER 10.2)

NAME - LOCATION	SIZE	REGION	BACT/LAER

11.0 MISCELLANEOUS

BACT/LAER CLEARINGHOUSE REPORT Page 1 of 2 pages

SOURCE TYPE/SIZE: OIL SHALE PROJECT 5000 BPD

NAME/ADDRESS: C-B OIL SHALE VENTURE/RIO BLANCO COUNTY, CO (Occidental Oil Shale, Inc. and Ashland Oil of Colorado)

DETERMINATION IS: (CONDITIONAL)/FINAL/PENDING: DATE OF ISSUE: 12/15/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VIII (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Mine Vent		TSP	16.0 lb/hr		
		SO_2	7.0 lb/hr		
In-situ gas		TSP	7.4 lb/hr		
		SO_2	17.4 lb/hr		
Sulfur removal facility for control of gaseous sulfur emissions shall be designed and operated to insure at least 99.0% overall gaseous sulfur recovery and no greater than 15 PPM H_2S concentration in the off-gas are continually achieved. 20% opacity limit for mining operation. Control fugitive dust (water and/or chemical sprays) to greatest extent possible.					

NOTES: Permit covers First phase only.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: OIL SHALE PROJECT 5000 BPD

NAME/ADDRESS: C-B OIL SHALE VENTURE/RIO BLANCO COUNTY, CO (Occidental Oil Shale, Inc. and Ashland Oil of Colorado)

DETERMINATION IS: (CONDITIONAL)/FINAL/PENDING: DATE OF ISSUE: 12/15/77 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VIII (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Steam boiler		TSP	16.3 lb/hr or 0.1 lb/MMBtu (whichever is less)		
		SO_2	3.6 lb/hr or 0.8 lb/MMBtu (whichever is less)		
Mine shaft transfer		TSP	1.7 lb/hr		
Shale conveyor		TSP	7.7 lb/hr		
ROM ore handling		TSP	29.2 lb/hr		

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: OIL SHALE PROJECT 11,000 BARREL/DAY

NAME/ADDRESS: RIO BLANCO OIL SHALE PROJECT C-a RANGELY, CO (Gulf Oil and Standard Oil)

DETERMINATION IS: (CONDITIONAL)/FINAL/PENDING: DATE OF ISSUE: 12/15/77 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VIII
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Thermaloxidizer/		PART	11.0 lb/hr		
scrubber		SO_2	167.1 lb/hr - insure 90% gaseous sulfur recovery and no greater than 250 PPMV		
Steam boiler		PART	0.7 lb/hr or (0.1 lb/MMBtu) whichever is less		
		SO_2	16.6 lb/hr or (0.8 lb/MMBtu) whichever is less		

NOTES: Permit covers First phase of project

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

SOURCE TYPE/SIZE: OIL SHALE PROJECT 11,000 BARREL/DAY

NAME/ADDRESS: RIO BLANCO OIL SHALE PROJECT C-a RANGELY, CO (Gulf Oil and Standard Oil)

DETERMINATION IS: (CONDITIONAL)/FINAL/PENDING: DATE OF ISSUE: 12/15/77 BASIS:* BACT[1]/LAER/(BACT)[2]
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION VIII
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Shaft construction					
(Underground mining)					
Mine Vent		PART	1.6 lb/hr		
Vehicular movement		PART	5.4 lb/hr		
ROM ore handling		PART	9.1 lb/hr		
		Opacity	< 20%		
Fugitive Dust	Must be controlled (water and/or chemically) to greatest extent possible: roads,				
	parking areas, drill pads and shale deposit areas.				

NOTES:

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: GRAPHITE ELECTRODE MANUFACTURING

NAME/ADDRESS: GREAT LAKES CARBON CORPORATION, New York, NY Site at Benning, AR

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: _____ BASIS:* BACT[1] /LAER/(BACT[2])
FOR NEW/MODIFIED SOURCE

BY Region VI _____ _____
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Graphitizing Furnace		CO	138.32 (B)	Proper building design	
		TSP	0.71 lb/hr (B)		
Materials Preparation		TSP	1.8 lb/hr (B)		
Pneumatic Crane		TSP	2 lb/hr (B)		
Stock cleaning, core		TSP	0.8 lb/hr (B)		
sampling, trimming					
Electrode machining		TSP	1.6 lb/hr (B)		

NOTES: _____

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COAL CONVERSION PLANT (LOW BTU GAS)

NAME/ADDRESS: OFFICE OF PIKE COUNTY JUDGE, PIKE COUNTY COAL GASIFICATION PROJECT, DOUGLAS, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/24/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY REGION IV/KENTUCKY DEPT. OF NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Coal gasifiers with				Smokeless flare tips	
emergency flares					
[a] Indirect heat exchangers (2) 20×10^6 Btu/hr each					
PHASE I AND II		SO_2	The lesser of 17.84 lb/hr		
			or 1.7 lb/10^6 BTU.		
		TSP	The lesser of 7.03 lb/hr		
			or 0.40 lb/10^6 BTU		

NOTES: [a] The indirect heat exchangers can operate in either Phase I or Phase II mode. Phase I represents the source operating mode during which the entire gaseous fuel output from gasifiers and supplemental No.2 fuel oil will be burned in Indirect Heat Exchangers. Continued -

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COAL CONVERSION PLANT (LOW BTU GAS)

NAME/ADDRESS: OFFICE OF PIKE COUNTY JUDGE, PIKE COUNTY COAL GASIFICATION PROJECT, DOUGLAS, KY

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 10/24/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY REGION IV/KENTUCKY DEPT. OF NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION
(Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
PHASE II only		Opacity	20%		
		H_2S (in low BTU	5 ppm at 85° F	Stretford-Holmes	
		producer gas)		desulfurization system	
				or equal	
Coal handling		Fugitive dust		Wet suppression and	
				enclosure	

NOTES: Phase II represents the source operating mode during which the fuel gas produced by gasifiers will be desulfurized and made available for sale. Indirect heat exchangers will burn only desulfurized fuel gas, No.2 fuel oil and the oils and tar from the gas desulfurization system.

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BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: COAL GASIFICATION PLANT — 1 TON/HOUR COAL

NAME/ADDRESS: ROCKWELL INTERNATIONAL, CANOGA PARK, CA — Site at Simi Hills, CA

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 7/18/78 BASIS:* BACT[1]/LAER/(BACT[2])
FOR (NEW)/MODIFIED SOURCE

BY EPA REGION IX (Agency) _____ (Person) _____ (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
All plant facilities	Permit limits to	TSP	0.94 lb/ton coal feed	Fabric filters (6)	99.9+
	24 ton/day (daily				
	avg.) 9 ton/day				
	(annual avg.)				
		SO_2	30.0 lb/ton coal feed	Sulfur removal system	
				(Claus plant)	
		NO_x	59.1 lb/ton coal feed	Also for SO_2 - Limit on S in coal	
				10% daily avg; 5% annual avg.	

NOTES: Water sprays shall be used to control fugitive emissions from aggregate coal storage and loading areas.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

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BACT/LAER CLEARINGHOUSE REPORT Page 1 of 2 pages

SOURCE TYPE/SIZE: TIRE MANUFACTURING FACILITY

NAME/ADDRESS: FIRESTONE TIRE AND RUBBER COMPANY, AKRON, OHIO Site at Lavergne, TN

DETERMINATION IS: CONDITIONAL/FINAL/PENDING: DATE OF ISSUE: 11/22/78 BASIS:* BACT[1] LAER BACT[2]
FOR NEW/MODIFIED SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Boiler		HC		Nat. gas or No.6 oil	
Storage tank		HC	Minor	None	
Slab handling		HC	Neg	None	
Cooling systems					
Cement mix area		HC	9.93 lb/hr	None	
Cement extruder		HC	Neg	None	
Tubers		HC	91.3 ton/yr (L)	None	
Roll colendering line		HC	Neg	None	

NOTES: Offsets were obtained from cord cutting, tire building, and tire doping operations at existing facilities.

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

BACT/LAER CLEARINGHOUSE REPORT

SOURCE TYPE/SIZE: TIRE MANUFACTURING FACILITY

NAME/ADDRESS: FIRESTONE TIRE AND RUBBER COMPANY, AKRON, OHIO Site at Lavergne, TN

DETERMINATION IS: CONDITIONAL/(FINAL)/PENDING: DATE OF ISSUE: 11/22/78 BASIS:* BACT[1] /(LAER)/BACT[2]
FOR NEW/(MODIFIED) SOURCE

BY EPA REGION IV (Agency) (Person) (Phone)

PERMIT PARAMETERS: AFFECTED FACILITIES	THROUGHPUT CAPACITY, weight rate	POLLUTANT(S) EMITTED	EMISSION LIMIT(S) AND BASIS FOR**	CONTROL STRATEGY DESCRIPTION Equipment type, etc.	Eff.,%
Tire building		HC		None	
Tire doping		HC	0	Water base dope	100
Tire painting and repairing		HC	63.5 Btu/hr	None	

NOTES: Offsets were obtained from cord cutting, tire building, and tire doping operations at existing facilities

* Circle one. BACT-1 indicates determination made under pre-1977 amendments; BACT-2 indicates post-1977 amendments to CAA.

** Basis symbols: Use B = BACT, N = NSPS, S = SIP, L = LAER, P = PSD Increment

ADDITIONAL DETERMINATIONS - MISCELLANEOUS 11.0

NAME - LOCATION	SIZE/FACILITIES	REGION	BACT/LAER